

Appendix A

Input Phosphorus Concentrations For Regional PCAs With Implementation of On-Farm PCAs

This appendix describes the methods used to estimate the input phosphorus concentrations for regional PCAs given implementation of on-farm PCAs and the results. These concentrations were used in evaluating the PCA combinations using the Full Cost Accounting Evaluation Model.

The 18 combinations include 3 regional technologies and 6 on-farm technologies. The two regional PCAs whose phosphorus load impacts depend on the input phosphorus concentration are the RASTAs (PCA 7) and the Terminal Large Scale Water Treatment Facility (PCA 10). The phosphorus load impact of Tributary Sediment Removal (PCA 9) does not depend on input phosphorus concentrations. The input concentrations used to evaluate PCA 7 and 10 will change depending on the on-farm PCAs that are implemented. Therefore, the impact of on-farm PCA effluent phosphorus loads on the input phosphorus concentrations of the regional PCAs was estimated.

Summary of Results. A summary of the input phosphorus concentrations that were used in the evaluation of PCA combinations is provided in Table A-1. The numbers in bold are those that will be used. For on-farm PCAs 1 through 6, the phosphorus concentrations in the effluent from these PCAs depend on the baseline land uses, which change over time. Thus, there are two effluent phosphorus concentrations for each on-farm PCA – one represents 2002 land uses and the other represents 2021 land uses. Because the phosphorus concentrations do not change very much between 2002 and 2021, one value was used for each PCA combination throughout the 60-year study period. For each on-farm PCA, the higher of the phosphorus concentrations were used.

Methodology for All On-Farm PCAs Except PCA 11. The method to adjust input phosphorus concentrations for PCAs 7 and 10 for all on-farm PCAs except PCA 11 is presented in Table A-2 using on-farm PCA 1 – Chemical Treatment of Runoff at Edge of Property.

First, the total phosphorus load entering the Regional PCA without the on-farm PCA was calculated using the existing input phosphorus concentrations of the water that would enter the Regional PCA (Row A of Table A-2) and the amount of water entering the Regional PCA (Row B of Table A-2). Both of these values were developed during Phase I of this project.

The equation used to calculate phosphorus load is:

$$\text{Equation (1): Phosphorus Load in Pounds} = \text{Acres} \times \text{Acre-Inches of Water Runoff} \times 43,560/12 \\ \times 64 \times \text{Phosphorus Concentration in mg/l} / 1,000,000$$

The 43,560/12 converts acre-inches of water into cubic feet and 64 is the pounds of water per cubic foot. This water weight is then multiplied by the concentration (in parts per million or mg/l) of phosphorus in the water and then divided by 1,000,000 to convert to pounds of phosphorus discharged. This calculation of phosphorus load entering the Regional PCA without PCA 1 is in Row (C).

The phosphorus concentrations and acre-inches entering the Regional PCAs (Rows A and B) and the phosphorus reduction from the on-farm PCAs (Row E) are provided in the Phase II Documentation Report. For the RASTAs, the quantity of water discharged from the RASTA was used to estimate the load reduction due to the RASTAs.

Table A-1
Summary of Input Phosphorus Concentrations for Regional PCAs Given Implementation of On-Farm PCAs

On-Farm Phosphorus Control Alternative (PCA)	PCA 7 - RASTAs			PCA 10 - Terminal Large Scale Water Treatment Facility
	Taylor Creek / Nubbin Slough STA	Lake Okeechobee Watershed Water Quality Treatment Facilities		
	S-191	S-154	S-65D	Kissimmee River, S-65
Input P Concentration without On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
New Input Phosphorus Concentration with On-Farm PCA, mg/l:				
1 - Chemical Treatment of Runoff at Edge of Property				
2002	0.48	0.60	0.09	0.15
2021	0.48	0.59	0.09	0.15
2 - Wetlands Treatment of Runoff at Edge of Property				
2002	0.53	0.65	0.10	0.17
2021	0.52	0.65	0.10	0.17
3 - Non-Structural Management at the Land Parcel Level				
2002	0.47	0.58	0.09	0.15
2021	0.46	0.57	0.09	0.15
4 and 5 - Optimization of Dairy Rule Design and Enhanced Cow-Calf BMPs				
2002	0.46	0.57	0.09	0.15
2021	0.48	0.59	0.09	0.15
6 - Alternative Land Uses				
2002	0.58	0.72	0.11	0.19
2021	0.57	0.71	0.11	0.18
11 - Isolated Wetlands Restoration on Pastureland (80,000 acres of restored wetlands)	0.46	0.61	0.05	0.16

Table A-2
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations –
PCA 1, Chemical Treatment of Runoff at Edge of Property, 2002 Land Uses

Row	Item	PCA 7 – RASTAs			PCA 10 -
		Taylor Creek / Nubbin Slough STA	Lake Okeechobee Watershed Water Quality Treatment Facilities	S-65D	Terminal Large Scale Water Treatment Facility Kissimmee River, S-65
(A)	Input Phosphorus Concentration without On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds:					
(C)	Entering Regional PCA without On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of Phosphorus Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA 1 (a) (E) = -238,622 * (D)	-24,036	-7,455	-1,687	-35,880
(F)	New Load Entering Regional PCA with PCA 1 (F) = (C) + (E)	77,466	24,027	5,436	115,640
(G)	New Input Phosphorus Concentration with PCA 1, mg/l	0.48	0.60	0.09	0.15

^(a) Total annual load reduction at Lake Okeechobee due to PCA 1 is 238,622 pounds per year. This load reduction was distributed to the regional PCAs based on the proportion of total loads to the Lake (457 metric tons per year or 1,007,685 pounds per year, 1996 to 2000 average) that represent those loads that would enter the Regional PCA without PCA 1.

The total annual load reduction at Lake Okeechobee due to PCA 1 is 238,622 pounds per year. The annual phosphorus load reduction at the Lake from PCA 1 was distributed to the Regional PCAs based on the proportion of total loads to the Lake that represent those loads that would enter the Regional PCA without PCA 1. The percent of total load to the Lake that enters the Regional PCA is calculated in Row D. It is the ratio of Row C and the total annual phosphorus load to the lake of 1,007,685 pounds. This total load is the 1996 to 2000 average of 457 metric tons per year. The calculation of the change in phosphorus loads entering the Regional PCA with PCA 1 is in Row E.

The new load to the Regional PCA was calculated as the original load plus the change in load due to PCA 1. This calculation of phosphorus load entering the Regional PCA with PCA 1 is in Row F.

The new input phosphorus concentration was then calculated using Equation 1 solved for Phosphorus Concentration in mg/l. This calculation is in Row G. Thus, for PCA 7, the new input concentrations for the three RASTAs included in PCA 7 are reduced from 0.63, 0.78 and 0.12 mg/l

to 0.48, 0.60 and 0.09 mg/l. For PCA 10, the new input concentration is reduced from 0.20 to 0.15 mg/l.

Methodology for PCA 11. The method used for PCA 11 is provided in Table A-3. It is identical to the method used for the other on-farm PCAs except that the percent of the PCA 11 phosphorus load reduction experienced at the regional PCA (Row D of Table A-3) was calculated differently. The total annual load reduction at Lake Okeechobee due to PCA 11 is 132,530 pounds per year.¹ This annual phosphorus load reduction was distributed to the Regional PCAs based on the proportion of isolated wetlands located upstream of each PCA 7 RASTA and PCA 10. Thus, for PCA 7, the new input concentrations for the three RASTAs included in PCA 7 are reduced from 0.63, 0.78 and 0.12 mg/l to 0.46, 0.61 and 0.05 mg/l. For PCA 10, the new input concentration is reduced from 0.20 to 0.16 mg/l.

Table A-3
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations –
PCA 11, Isolated Wetlands Restoration on Pastureland

Row	Item	PCA 7 - RASTAs			PCA 10 - Terminal Large Scale Water Treatment Facility Kissimmee River, S-65
		Taylor Creek / Nubbin Slough STA S-191	Lake Okeechobee Watershed Water Quality Treatment Facilities S-154	S-65D	
(A)	Input Phosphorus Concentration without On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds:					
(C)	Entering Regional PCA without On-Farm PCA	101,502	31,483	7,123	
(D)	% of Phosphorus Load Reduction at Regional PCA	21%	5%	3%	25%
(E)	Change due to On-Farm PCA 11 ^(a) (E) = -132,560 * (D)	-27,734	-6,948	-4,376	-33,772
(F)	New Load Entering Regional PCA with PCA 11 (F) = (C) + (E)	73,768	24,535	2,747	117,749
(G)	New Input Phosphorus Concentration with PCA 11, mg/l	0.46	0.61	0.05	0.16

^(a) Total annual load reduction at Lake Okeechobee due to PCA 11 (200,000 acres) is 132,530 pounds per year from the model developed for The Nature Conservancy.

¹ Hazen and Sawyer, "Evaluation of Isolated Wetlands Restoration on Pastureland in the Lake Okeechobee Watershed", Final Report, prepared for The Nature Conservancy, December 2002. Assumes 200,000 acres of improved pasture participate in the program.

Estimates of the restorable wetland acreage on grazing land by sub-basin are provided in Table A-4. There is an estimated 370,141 acres of restorable wetlands on grazing land. Under PCA 11, 80,000 acres will be restored. The restored acreage under PCA 11 by sub-basin was estimated based on the proportion of total restorable wetlands that are in the sub-basin times 80,000 acres.

Table A-4
Estimates of Restorable Wetlands on Grazing Lands, Kissimmee-Okeechobee Basin
(From The Nature Conservancy, TNC)

Sub-Basin No.	SFWM D Basin	Restorable Wetland Acreage	Acres Restored under PCA 11 ^(a)	Notes
2	S-65A	20,895	4,516	
3, 4	S-65B/C	32,816	7,093	
5	S-65D	33,581	7,258	
6	S-65E	7,030	1,519	
8	C-41A	25,275	5,463	
9	S-154	5,804	1,254	
10	S-191 (Taylor Creek-Nubbin Slough)	16,624	3,593	1
11	S-154C	1,003	217	2
12	S-133	11,251	2,432	
13	C-41	55,858	12,073	
14	C-40	29,874	6,457	
15	L-59E	4,434	958	
16	L-59W	2,818	609	2
17	L-60E	2,323	502	2
18	L-60W	1,358	294	2
19	L-61E	8,316	1,797	
20	L-61W	2,253	487	2
21	S-131	5,050	1,091	
22	L-49	6,660	1,439	
23	L-48	9,305	2,011	
24	Fisheating Creek	79,037	17,083	
25	Nicodemus Slough	8,576	1,854	3
26	S-135	0	0	4
Total		370,141	80,000	

^(a) 200,000 improved pasture acres participating / 80,000 wetland acres restored.

Notes:

- 1 Restorable wetland acreage figure for Taylor Creek drainage only; restorable wetland acreage for Nubbin Slough basin not included in TNC analysis due to lack of conservation value
- 2 Method used to estimate restorable wetland acreage may over-estimate actual acreage in small basins dominated by large canals and/or associated with historic lake edge
- 3 Restorable wetland GIS coverage not derived for Nicodemus Slough; acreage figure shown is based on a separate, site-specific study using a different method than was used for the other numbers in this table. Note that the former Nicodemus Slough sub-basin now incorporated into East Caloosahatchee basin
- 4 Restorable wetland acreage for S-135 basin not included in TNC analysis due to lack of conservation value

The percent of the PCA 11 load reduction entering the regional PCAs was estimated by first identifying the sub-basins that would be upstream from the regional PCA. These sub-basins are identified in Column (8) of Table A-5. For example, the Taylor Creek / Nubbin Slough RASTA (TC/NS RASTA), which would be located in the S-191 sub-basin, is downstream of sub-basins S-65A, S-65B, S-65C, S-65D, and S-154. Then the restored isolated wetland acreage under PCA 11 was calculated as the sum of the wetland acreage over the sub-basins upstream of the Regional PCA or the RASTA. For example, the sum of the restored wetland acreage in sub-basins S-65A, S-65B, S-65C, S-65D, and S-154 is 27,103 acres. This is 34 percent of the total wetlands that would be restored under PCA 11. PCA 7 is comprised of three RASTAs that have about the same up-stream sub-basins. Thus, the percent of the PCA 11 phosphorus load reduction at each RASTA was estimated as the product of the percent of wetlands restored upstream of the RASTA and the percent of total RASTA water flow that enters each RASTA. These percentages are provided in Column (7) of Table A-5.

Table A-5
Calculation of Percent of PCA 11 Phosphorus Load Reduction At Regional PCA

Regional PCA		Total Potential Isolated Wetland Acres	PCA 11 Wetlands Restored	% of Total Wetlands Restored
(1)		(2)	(3)	(4)
PCA 7	TC/NS RASTA, S-191	125,401	27,103	34%
PCA 7	LO RASTA, S-154	125,401	27,103	34%
PCA 7	LO RASTA, S-65D	53,711	11,609	15%
PCA 10	Terminal Large Scale Water Treatment Facility	94,322	20,386	25%

Regional PCA		Water Flow Entering PCA or RASTA (ac-in/year)	% of Water Flows Entering RASTA	% of PCA 11 P Load Reduction at Reg. PCA	Sub-Basins Upstream of RASTA Sub-Basin
(1)		(5)	(6)	(7)	(8)
PCA 7	TC/NS RASTA, S-191	693,504	62%	21%	S-65A, S-65B, S-65C, S-65D, S-154
PCA 7	LO RASTA, S-154	173,736	15%	5%	S-65A, S-65B, S-65C, S-65D, S-154
PCA 7	LO RASTA, S-65D	255,504	23%	3%	S-65A, S-65B, S-65C
Total		1,122,744	100%		
PCA 10	Terminal Large Scale Water Treatment Facility	3,261,036	100%	25%	S-65A, S-65B, S-65C, S-65D, S-65E

Reason for Difference in Methods. PCA 11 would be implemented in specific areas of the Lake Okeechobee watershed, so the approach took into account the location of the restored wetlands to distribute the phosphorus load reduction from PCA 11 to each regional PCA. The other on-farm PCAs would be implemented throughout the watershed so the percent of loads reaching each regional PCA without the on-farm PCA is sufficient to distribute the phosphorus load reduction caused by the on-farm PCA to each regional PCA.

Effect of Phosphorus Assimilation Rates. The percent of the original phosphorus load that assimilates into the environment before it reaches the Lake will depend on the distance that the water travels and the type of terrain. For example, the estimated phosphorus reduction to the Lake under PCA 11 (-132,530 pounds per year) was based on an assimilation rate of 36 percent. This value depends on the miles the water travels through land, wetlands and open channels. The required inputs to the assimilation model, including polygon size, sub-basin size, and distances, are the averages for the sub-basins and were taken from the District's LOADSS research. That is, the phosphorus leaving the on-farm PCAs is assumed to begin the journey to the Lake in a sub-basin represented by the averages for the entire study area. This approach was chosen as the most cost-effective yet representative method to account for phosphorus assimilation from the on-farm PCAs to the Lake.

The distances were based on the average of actual distances from each sub-basin taken from the LOADSS model. The distances from the sub-basin center to the nearest canal or river and the distances from the canal/river to the Lake were calculated and averaged over all sub-basins. The average distance from the sub-basin center to the nearest canal or river is 2.65 miles. This was divided into 0.25 miles of overland flow and 2.40 miles of flow through wetlands. The average distance from the point of entry into the canal or river and Lake Okeechobee is 12.26 miles. Additional information can be found in Section 14.0 of the Phase II Documentation Report.

For the purposes of this study, the Regional PCAs were assumed to be located near the Lake. Therefore, the assimilation rate used to estimate the input phosphorus concentrations entering the Regional PCAs due to PCA 11 assumes that the water flows through 12.26 miles of open channel before it reaches the Regional PCA. The actual location of the Regional PCAs could be from zero miles to 10 miles from the Lake. Sensitivity analysis of PCA 11's assimilation rate with respect to the miles of open channel was conducted and the results are presented in Table A-6. The results show that the assimilation rate could vary from 36 percent (the Regional PCA is right next to or near the Lake) to 22 percent (the Regional PCA is 12.26 miles from the Lake). This percentage difference is not considered to be significant enough to warrant a more detailed evaluation of the effect of assimilation on phosphorus concentrations entering the Regional PCAs.

Table A-6
Sensitivity Analysis of Open Channel Distance on PCA 11's
Phosphorus Assimilation Rate

Distance from Regional PCA to Lake in miles	Channel Distance from PCA 11 to Regional PCA in Miles	Assimilation Rate for PCA 11
0	12.26	36%
2.26	10.00	34%
10.26	2.00	24%
12.26	0	22%

The calculations for the other PCA combinations are provided in Tables A-7 through A-15. Row G of each table is summarized in the Table A-1 summary of results presented earlier in this Appendix. All phosphorus leaving each on-farm PCA site is assumed to travel 12.26 miles through open channel to reach the regional PCA.

Table A-7
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCA 1, Chemical Treatment of Runoff At Edge of Property, 2021 Land Uses

Row	Item	PCA 7 - RASTAs			PCA 10 -
		TC/NS STA	LO Water Quality Treatment Facilities	S-65D	Terminal Large Scale WTF
		S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds:					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Reg. PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-245,357) * (D)	-24,714	-7,666	-1,734	-36,893
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	76,788	23,817	5,389	114,628
(G)	New Input P Concentration with On-Farm PCA, mg/l	0.48	0.59	0.09	0.15

Table A-8
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCA 2, Wetlands Treatment of Runoff At Edge of Property
2002 Land Uses

2002 Land Uses					
		PCA 7 - RASTAs			PCA 10 - Terminal Large Scale WTF
		TC/NS STA	LO Water Quality Treatment Facilities		
Row	Item	S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds:					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-162,474) * (D)	-16,366	-5,076	-1,148	-24,430
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	85,137	26,407	5,975	127,090
(G)	New Input P Concentration with On- Farm PCA, mg/l	0.53	0.65	0.10	0.17

Table A-9
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCA 2, Wetlands Treatment of Runoff At Edge of Property
2021 Land Uses

		PCA 7 - RASTAs			PCA 10 -
		TC/NS	LO Water Quality		Terminal
		STA	Treatment		Large
			Facilities		Scale WTF
Row	Item	S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds:					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-168,530) * (D)	-16,976	-5,265	-1,191	-25,341
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	84,527	26,217	5,932	126,180
(G)	New Input P Concentration with On-Farm PCA, mg/l	0.52	0.65	0.10	0.17

Table A-10
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations PCA 3,
Non-Structural Management at the Land Parcel Level
2002 Land Uses

		PCA 7 - RASTAs			PCA 10 -
		TC/NS STA	LO Water Quality Treatment Facilities		Terminal Large Scale WTF
Row	Item	S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-262,753) * (D)	-26,467	-8,209	-1,857	-39,509
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	75,036	23,274	5,266	112,012
(G)	New Input P Concentration with On- Farm PCA, mg/l	0.47	0.58	0.09	0.15

Table A-11
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations PCA 3,
Non-Structural Management at the Land Parcel Level
2021 Land Uses

		PCA 7 - RASTAs			PCA 10 - Terminal Large Scale WTF
		TC/NS STA	LO Water Quality Treatment Facilities		
Row	Item	S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-276,657) * (D)	-27,867	-8,643	-1,956	-41,600
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	73,635	22,839	5,167	109,921
(G)	New Input P Concentration with On- Farm PCA, mg/l	0.46	0.57	0.09	0.15

Table A-12
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCAs 4 and 5, Optimization of Dairy Rule Design and Enhanced Cow-Calf BMPs
2002 Land Uses

Row	Item	PCA 7 - RASTAs			PCA 10 -
		TC/NS	LO Water Quality		Terminal Large
		STA	Treatment Facilities		Scale WTF
		S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCAs 4 and 5 (E) = (-41,462 + -229,031)* (D)	-27,246	-8,451	-1,912	-40,673
(F)	New Load Entering Regional PCA with PCAs 4 and 5 (F) = (C) + (E)	74,256	23,032	5,211	110,848
(G)	New Input P Concentration with On-Farm PCAs, mg/l	0.46	0.57	0.09	0.15

Table A-13
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCAs 4 and 5, Optimization of Dairy Rule Design and Enhanced Cow-Calf BMPs
2021 Land Uses

Row	Item	PCA 7 - RASTAs			PCA 10 - Terminal
		TC/NS	LO Water Quality		Large Scale WTF
		STA	Treatment Facilities		Kissimmee River, S-65
		S-191	S-154	S-65D	
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds:					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction at Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCAs 4 and 5 (E) = (-41,462 + -229,031)* (D)	-24,885	-7,719	-1,746	-37,148
(F)	New Load Entering Regional PCA with PCAs 4 and 5 (F) = (C) + (E)	76,617	23,764	5,377	114,373
(G)	New Input P Concentration with On-Farm PCAs, mg/l	0.48	0.59	0.09	0.15

Table A-14
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCA 6, Alternative Land Uses
2002 Land Uses

		PCA 7 - RASTAs			PCA 10 -
		TC/NS STA	LO Water Quality Treatment Facilities		Terminal Large Scale WTF
Row	Item	S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction to Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-72,125) * (D)	-7,265	-2,253	-510	-10,845
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	94,237	29,229	6,613	140,676
(G)	New Input P Concentration with On- Farm PCA, mg/l	0.58	0.72	0.11	0.19

Table A-15
Impact of On-Farm PCAs on Regional PCA Input Phosphorus Concentrations
PCA 6, Alternative Land Uses
2021 Land Uses

2021 Land Use					
		PCA 7 - RASTAs			PCA 10 -
		TC/NS STA	LO Water Quality Treatment Facilities		Terminal Large Scale WTF
Row	Item	S-191	S-154	S-65D	Kissimmee River, S-65
(A)	Input P Concentration w/o On-Farm PCAs, mg/l	0.63	0.78	0.12	0.20
(B)	Amount of Water Entering PCA 7 or PCA 10 (Acre-inches per year)	693,504	173,736	255,504	3,261,036
Phosphorus Load Entering Regional PCA, pounds					
(C)	Entering Regional PCA w/o On-Farm PCA	101,502	31,483	7,123	151,521
(D)	% of P Load Reduction to Regional PCA	10%	3%	1%	15%
(E)	Change due to On-Farm PCA (E) = (-90,985) * (D)	-9,165	-2,843	-643	-13,681
(F)	New Load Entering Regional PCA with PCA (F) = (C) + (E)	92,338	28,640	6,480	137,840
(G)	New Input P Concentration with On-Farm PCA, mg/l	0.57	0.71	0.11	0.18

Appendix B

Scaling Functions for Criteria Values

Figure B-1 – Scaling Function for Criterion 1 – Average Annual Reduction in Phosphorus Loads to Lake Okeechobee After Implementing PCA

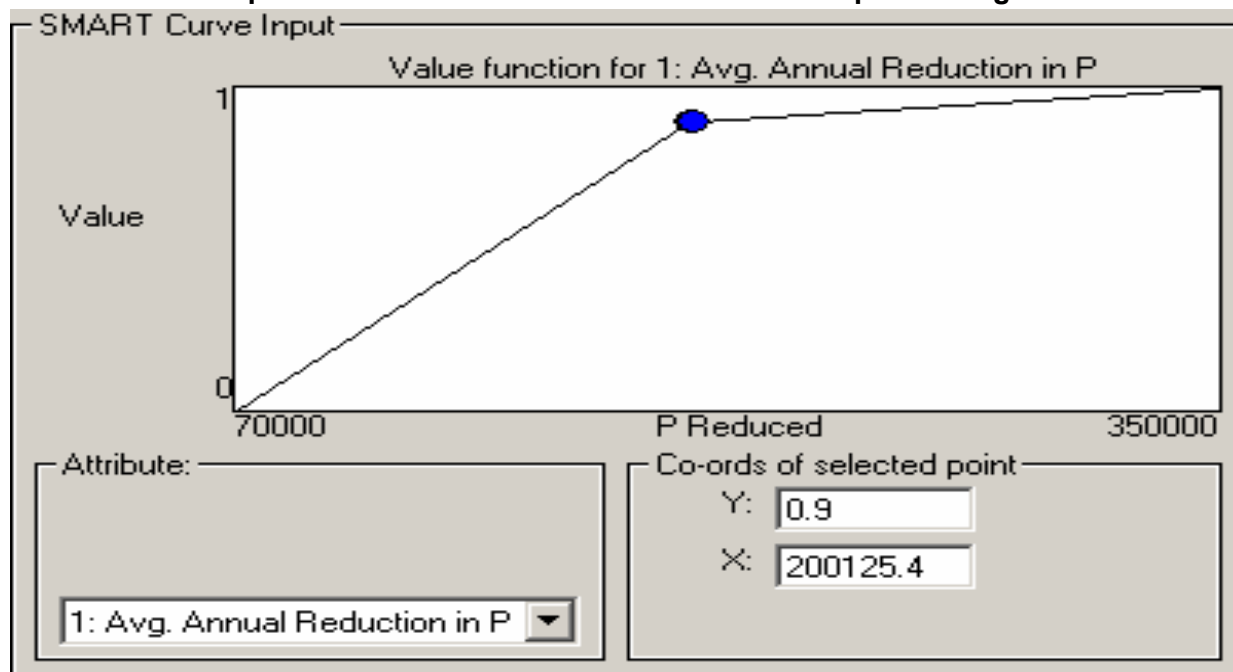


Figure B-2 – Scaling Function for Criterion 2 – Phosphorus Concentration at Site After Implementing PCA

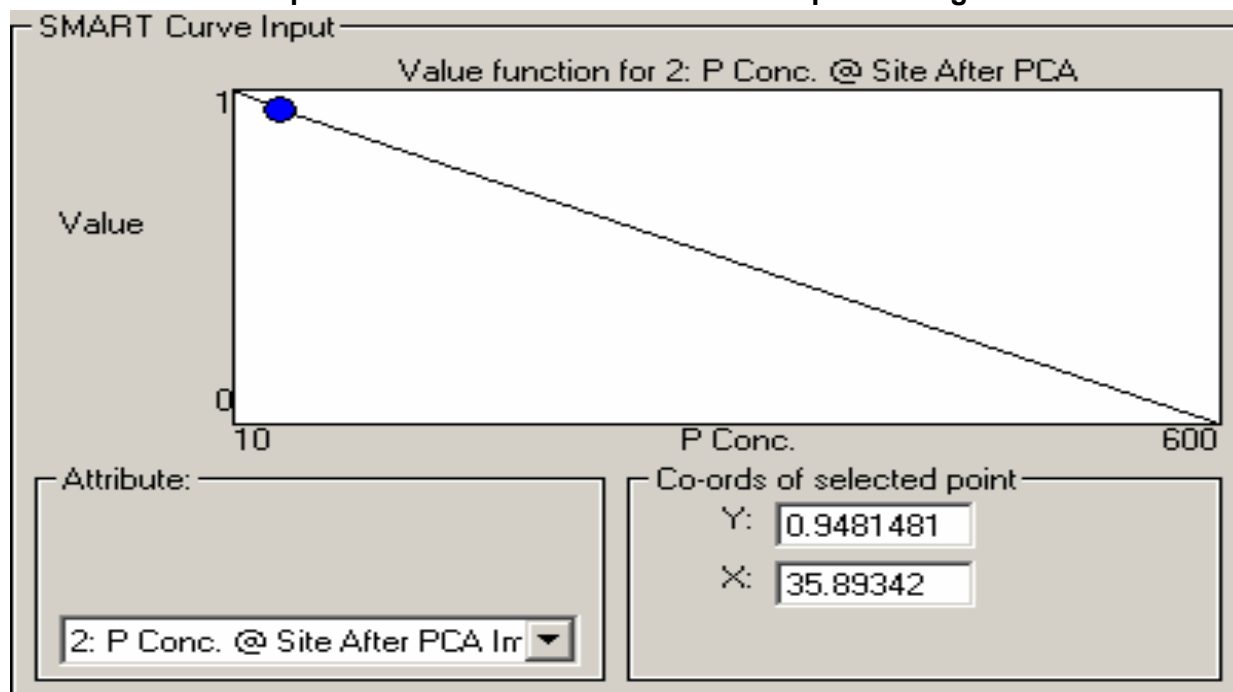


Figure B-3 – Scaling Function for Criterion 3 – Present Value Cost Per Pound of Phosphorus Removed at Site After Implementing PCA

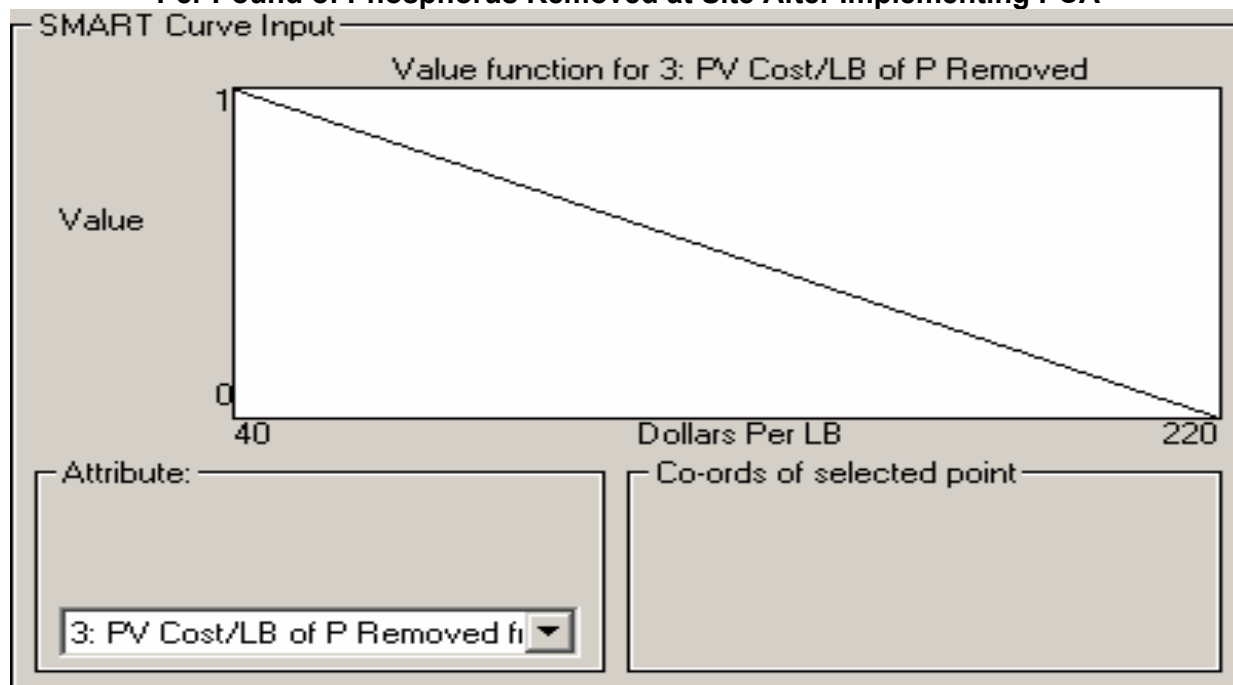
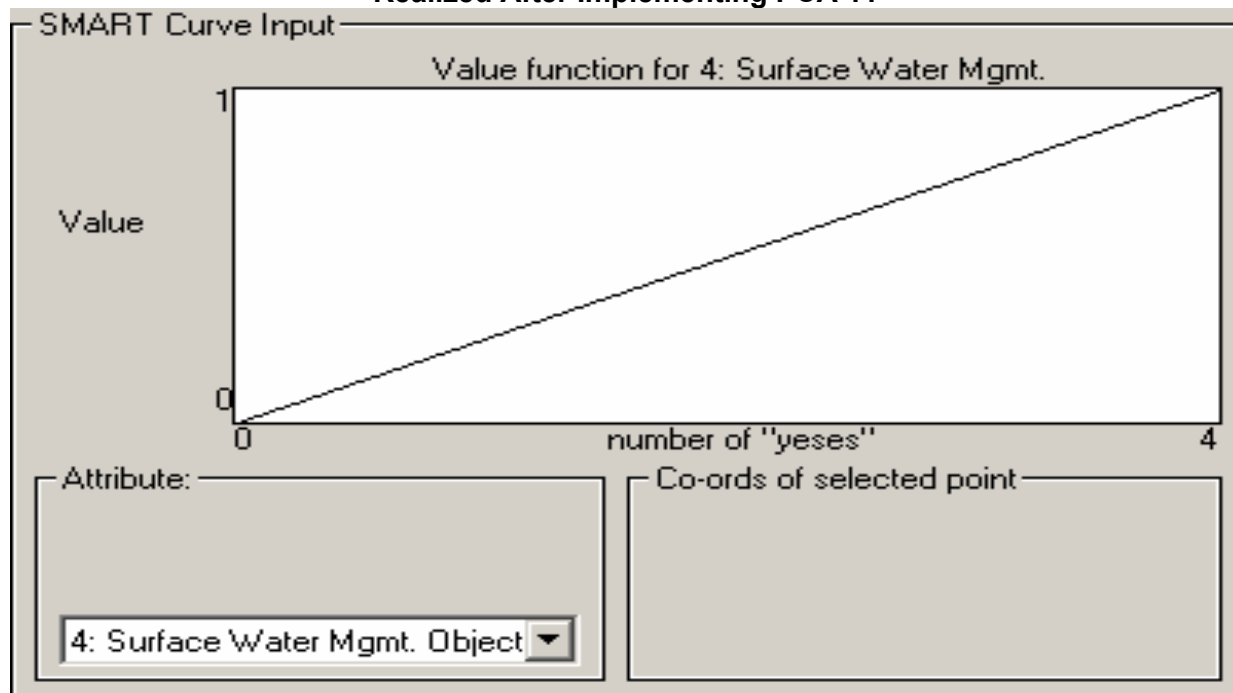
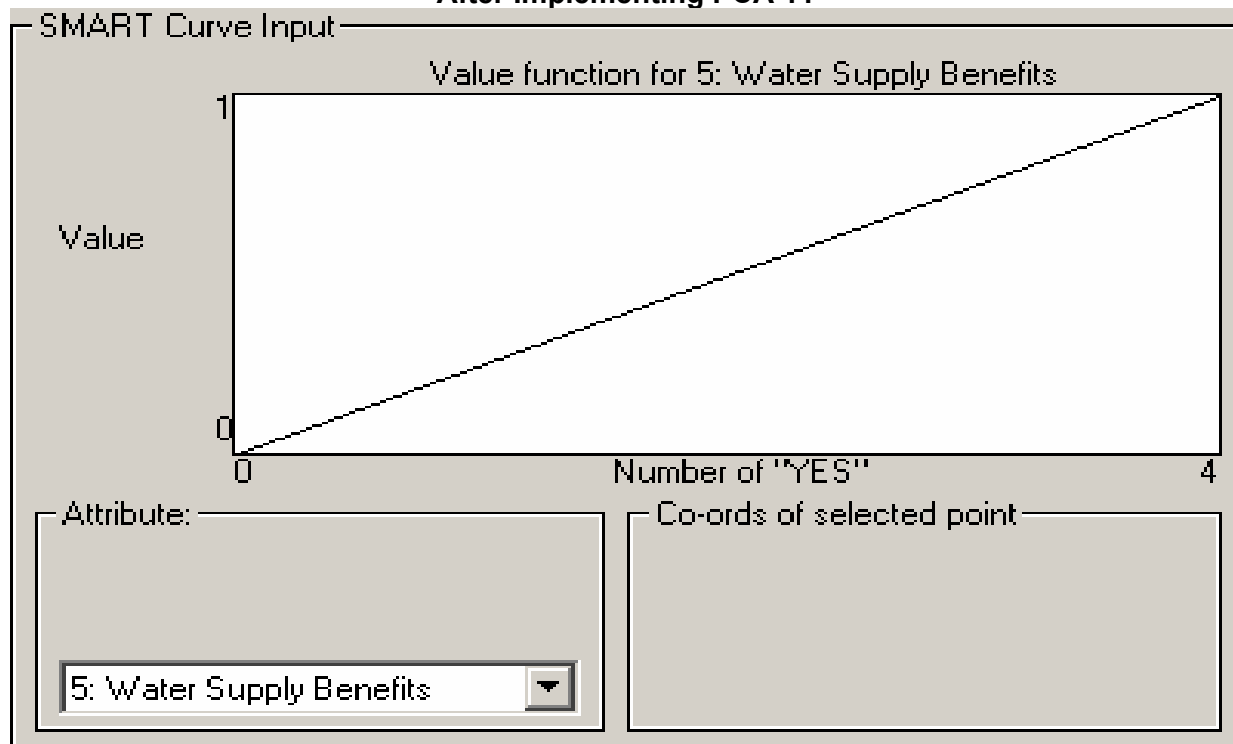


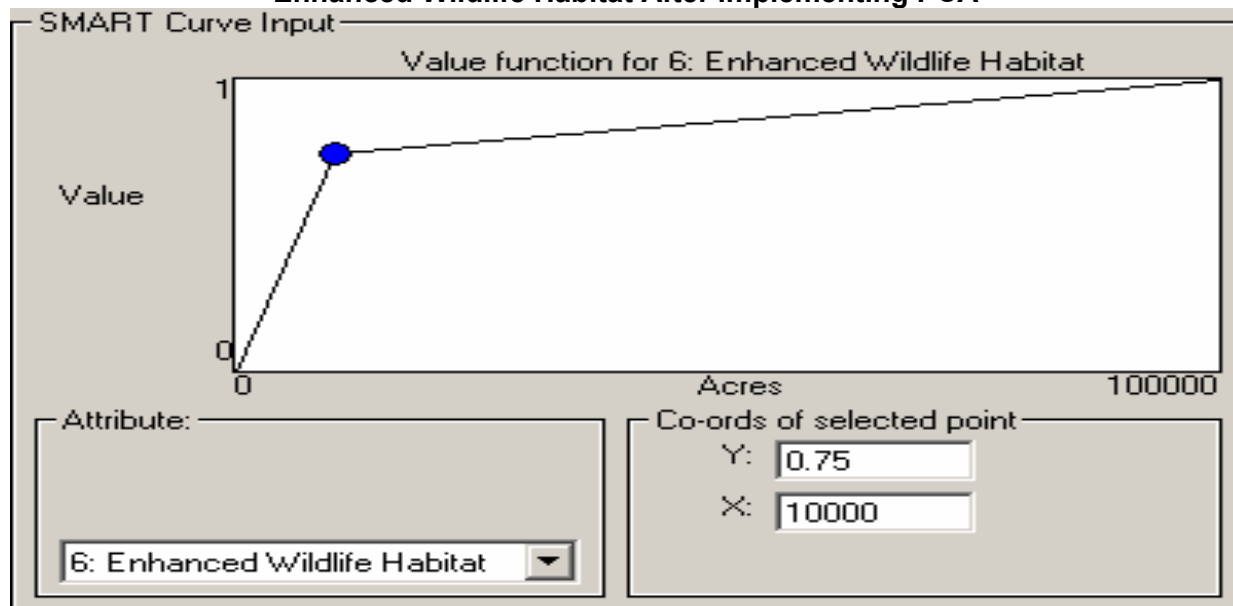
Figure B-4 – Scaling Function for Criterion 4 – Surface Water Management Objectives Realized After Implementing PCA 11



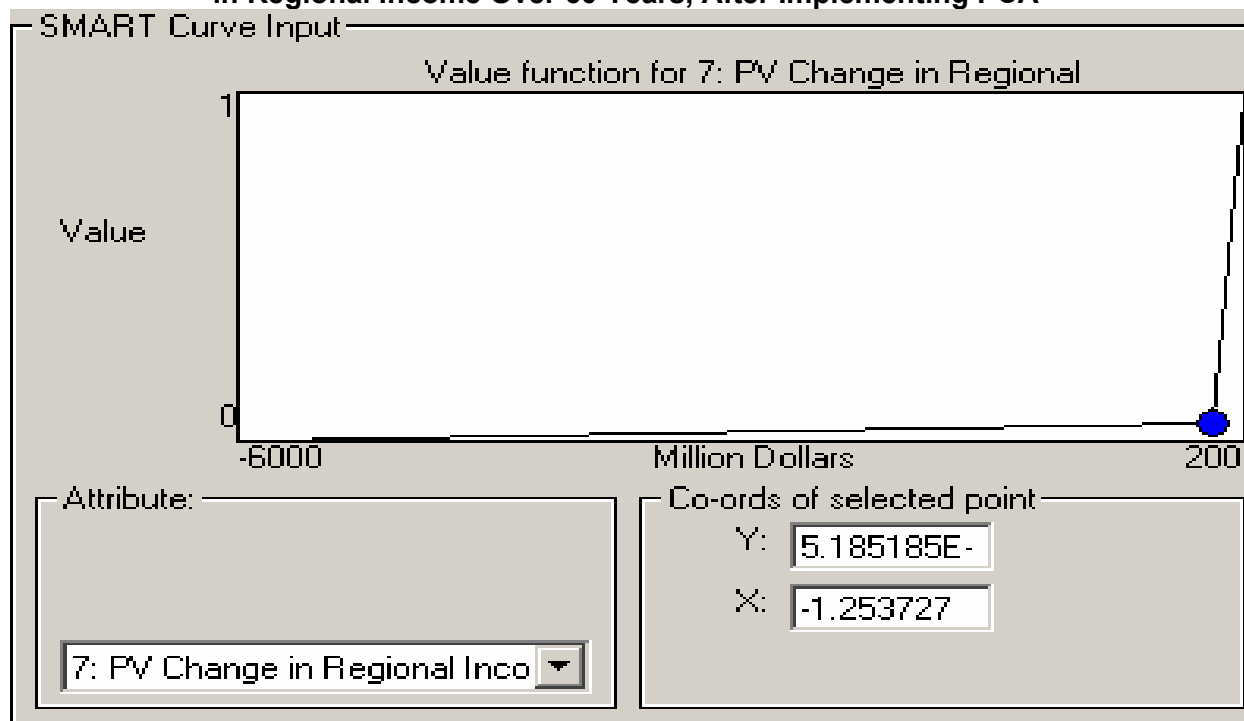
**Figure B-5 – Scaling Function for Criterion 5 – Water Supply Benefits
After Implementing PCA 11**



**Figure B-6 – Scaling Function for Criterion 6 –
Enhanced Wildlife Habitat After Implementing PCA**



**Figure B-7 – Scaling Function for Criterion 7 – Present Value Change
in Regional Income Over 60 Years, After Implementing PCA**



**Figure B-8 – Scaling Function for Criterion 8 –
Increased Recreation Opportunities After Implementing PCA**

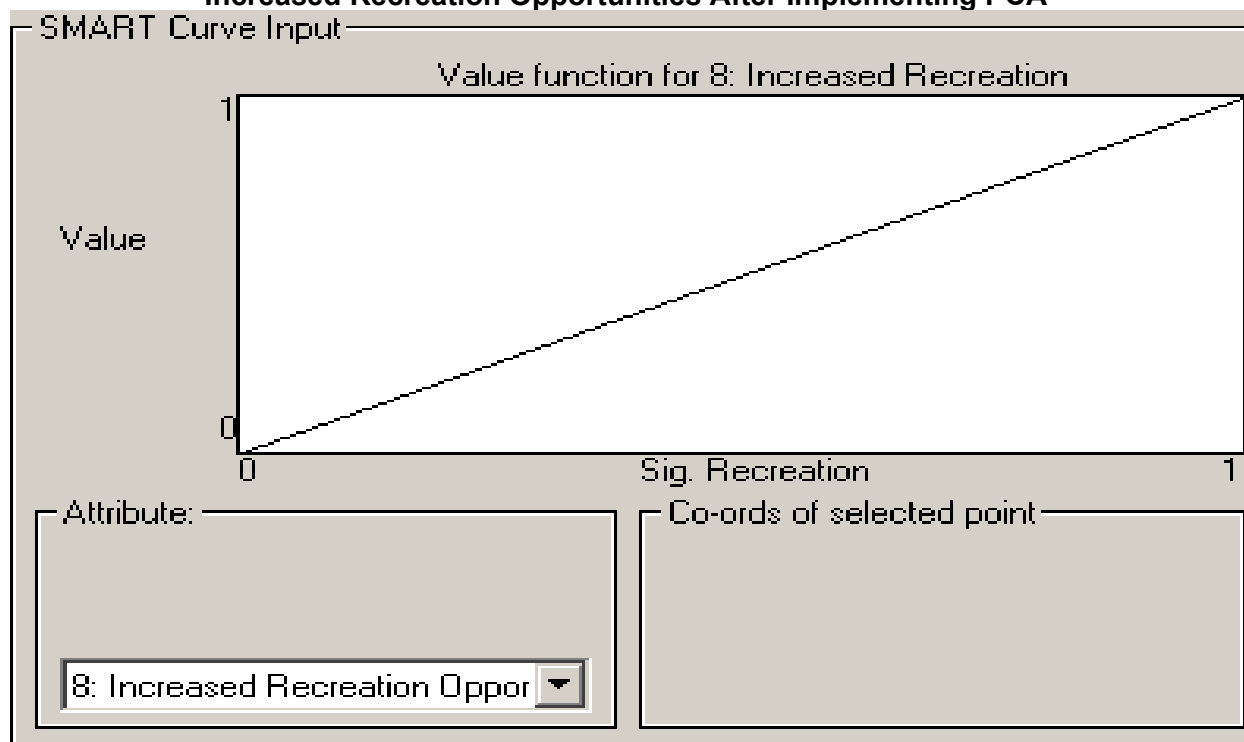


Figure B-9 – Scaling Function for Criterion 9 – Engineering/Technology Track Record After Implementing PCA

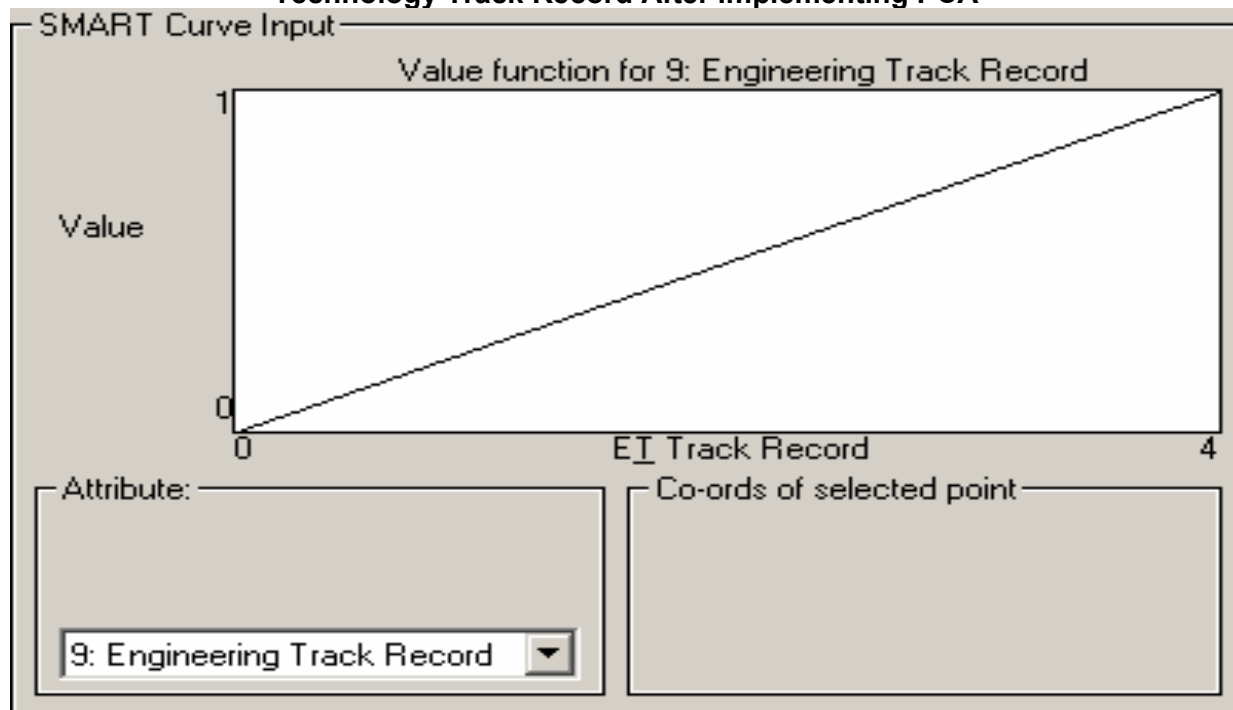
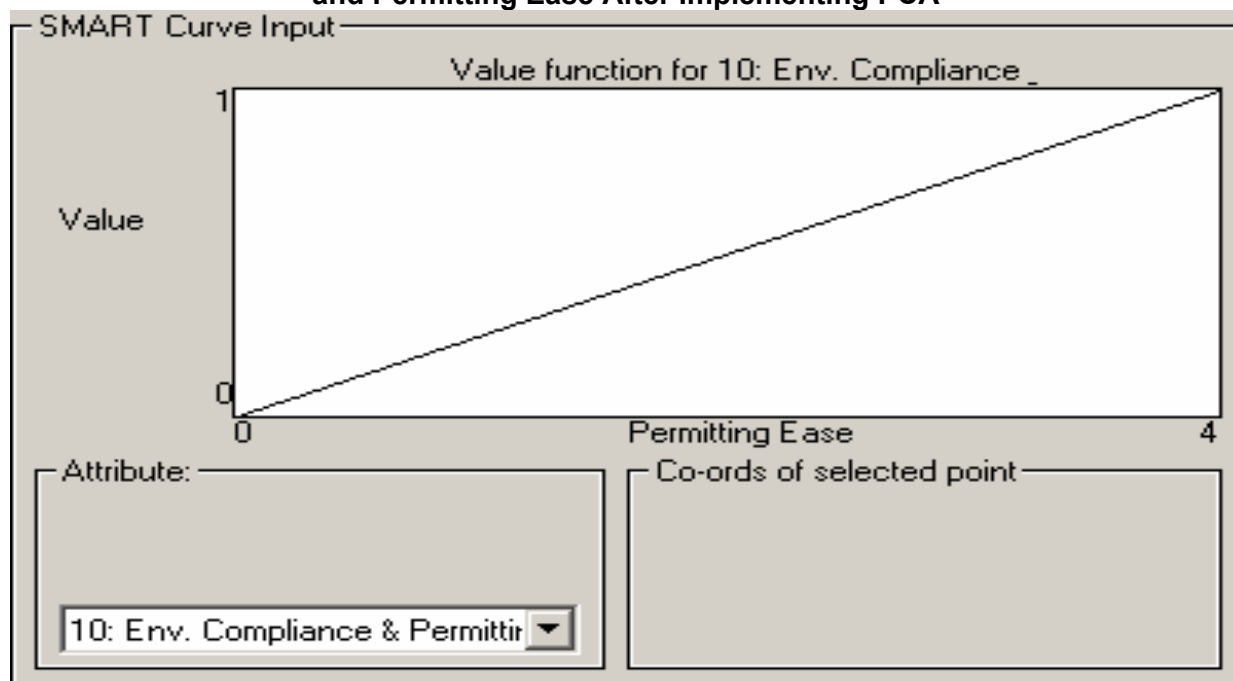


Figure B-10 – Scaling Function for Criterion 10 – Engineering Compliance and Permitting Ease After Implementing PCA

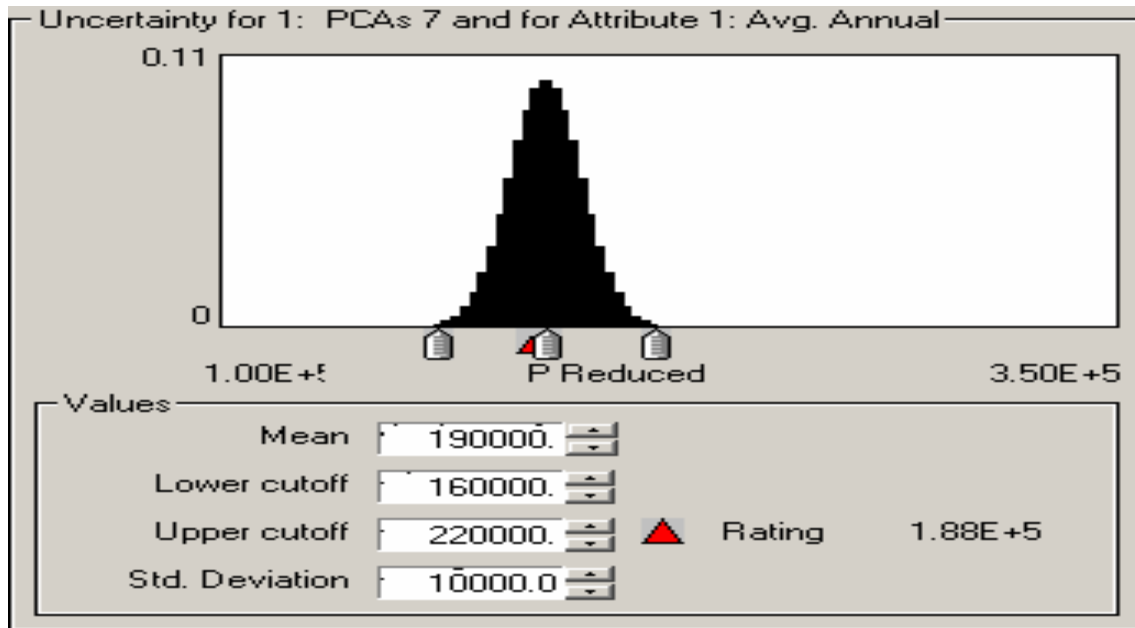


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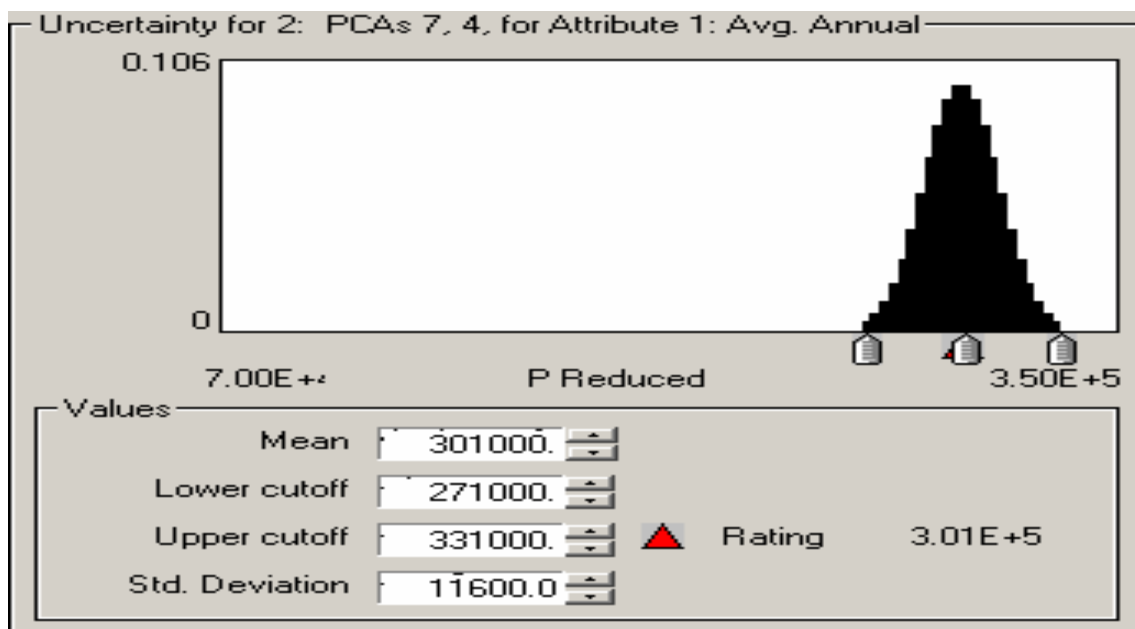
Appendix C

Uncertainty Distributions For The PCA Combinations

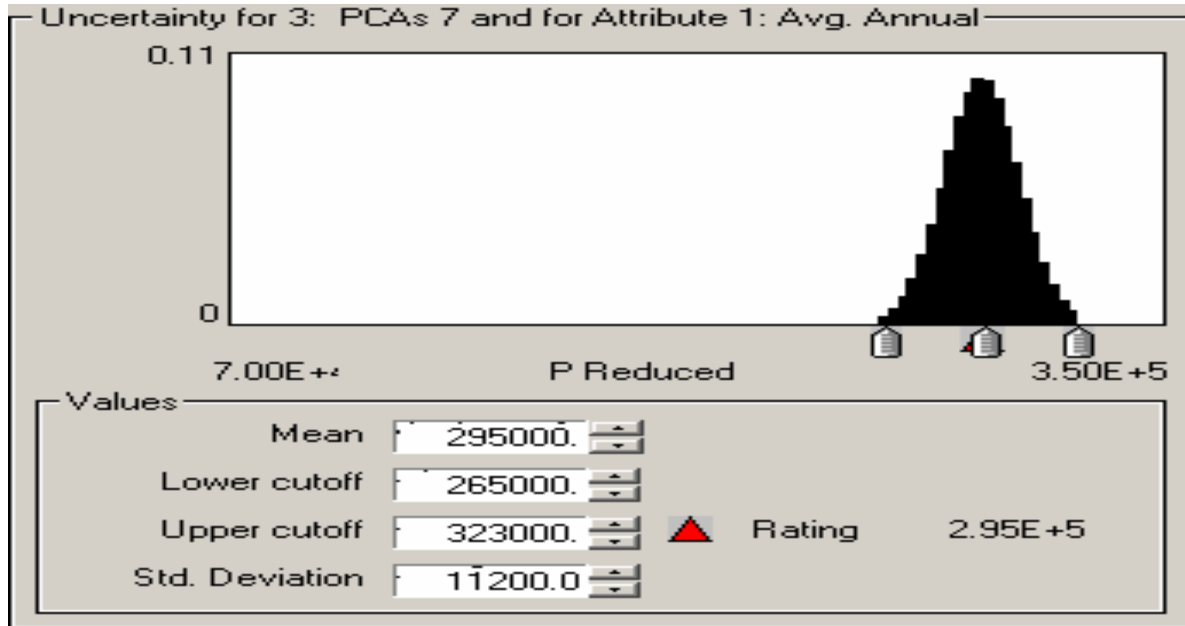
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 1: PCAs 7 and 11



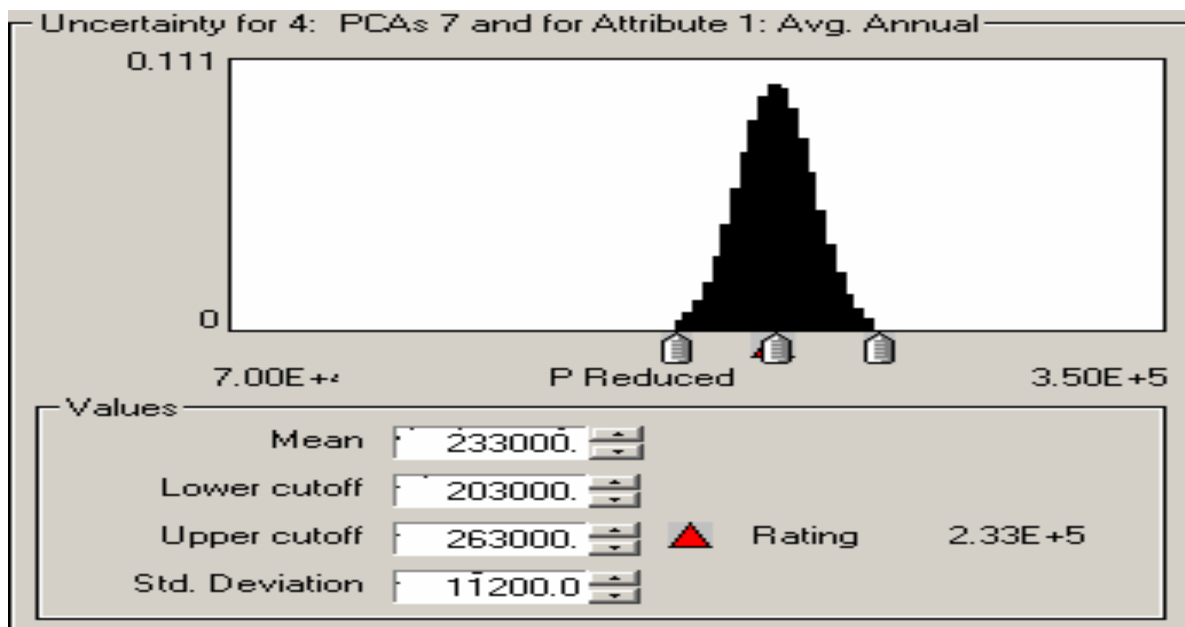
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 2: PCAs 7, 4 and 5



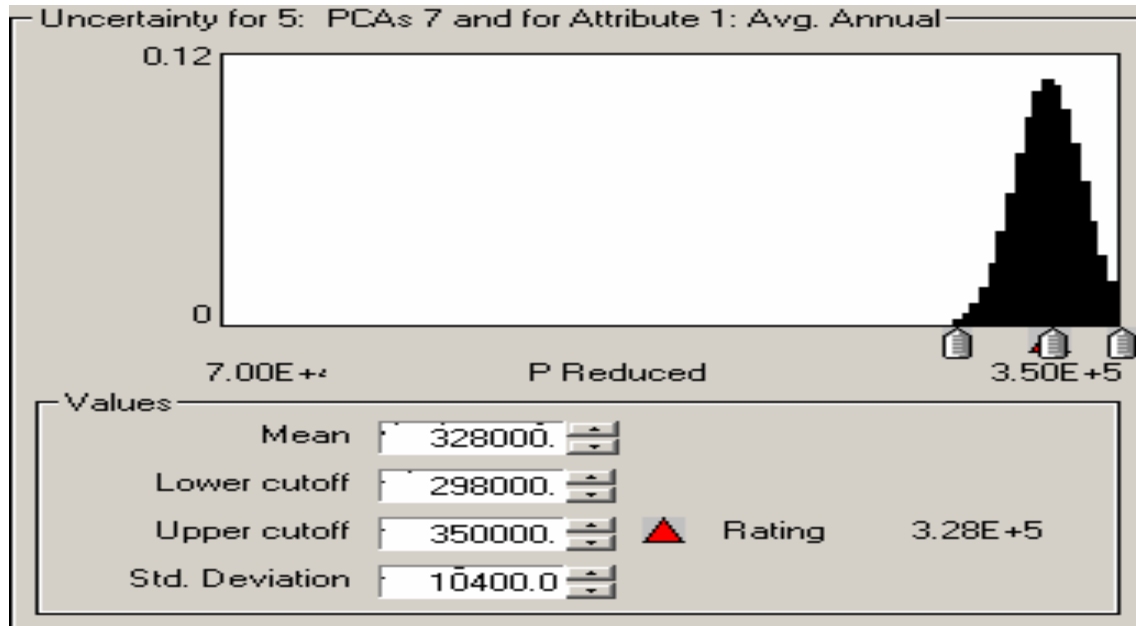
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 3: PCAs 7 and 1



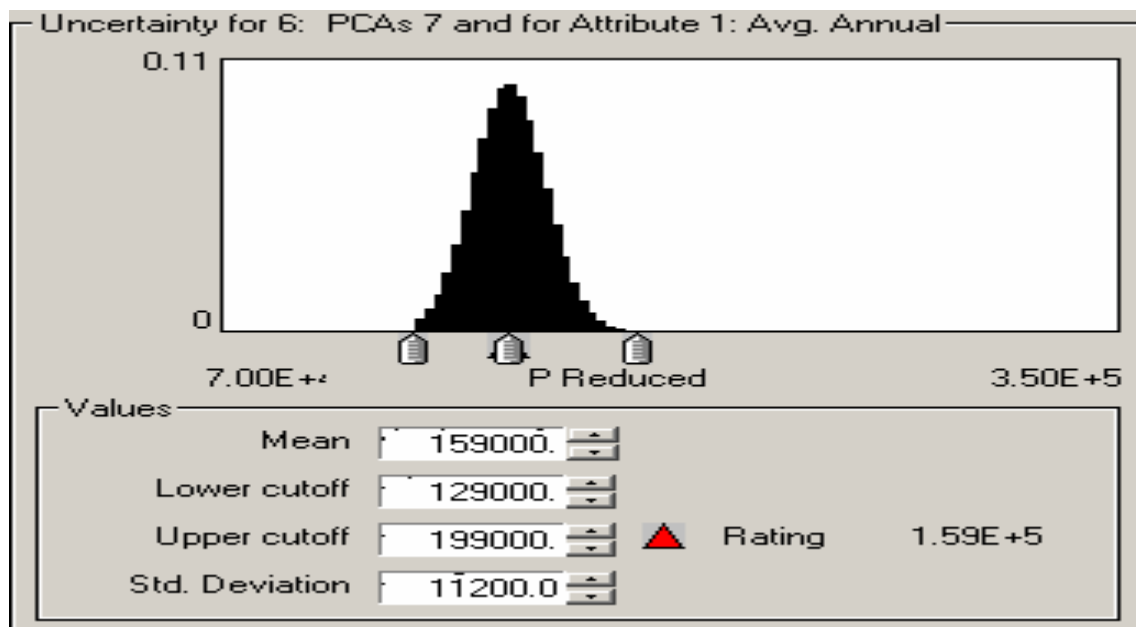
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 4: PCAs 7 and 2



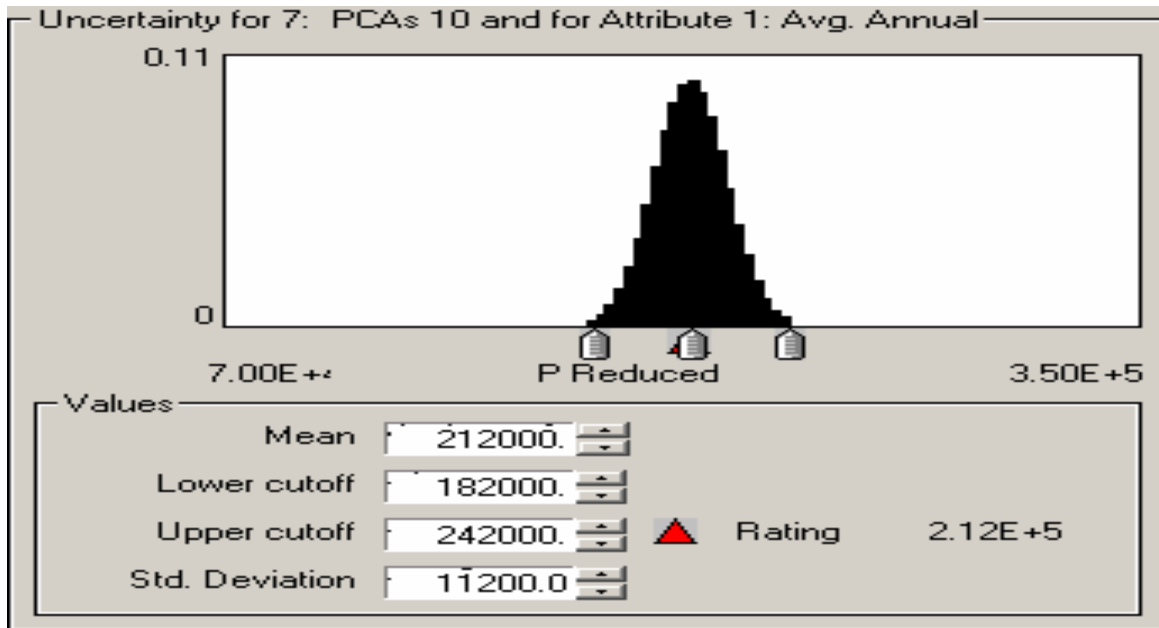
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 5: PCAs 7 and 3



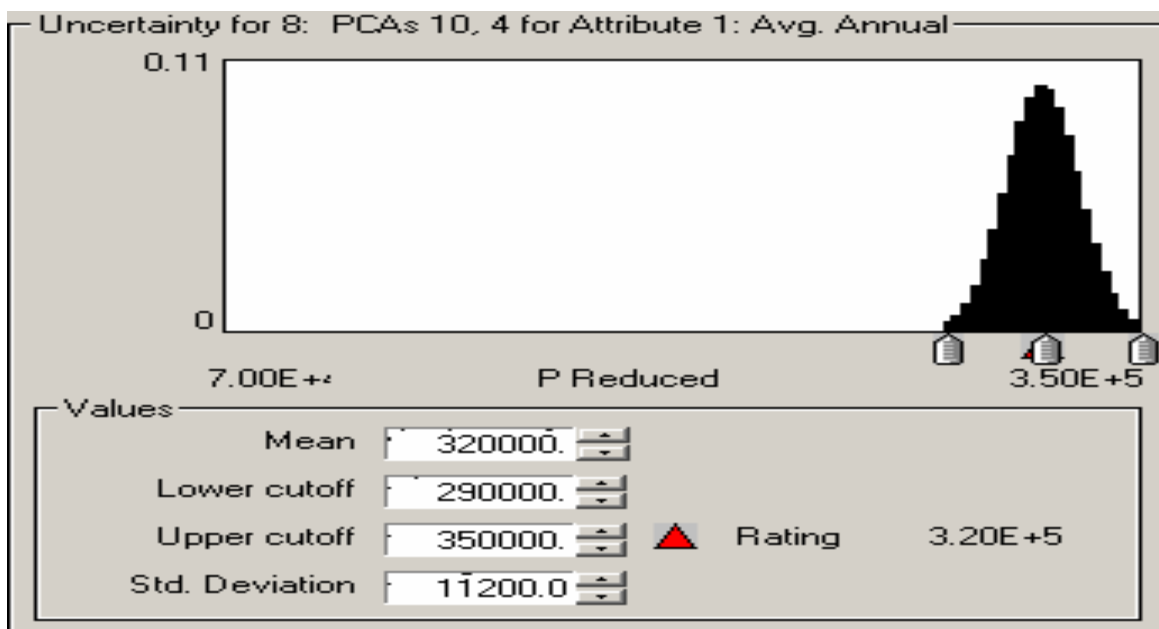
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 6: PCAs 7 and 6



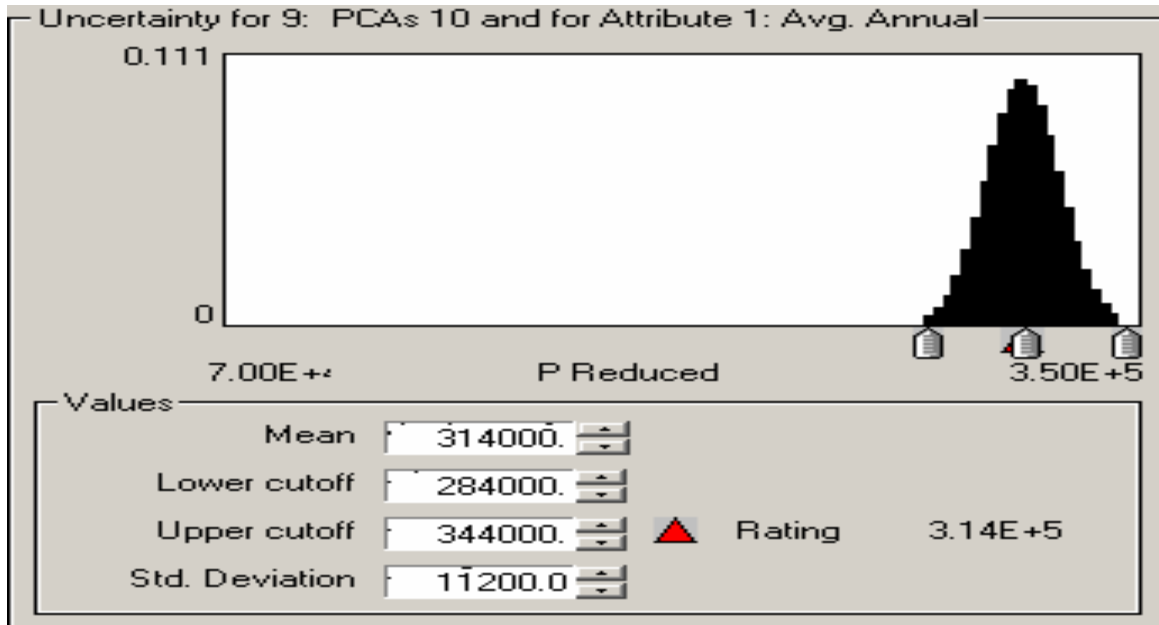
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 7: PCAs 10 and 11



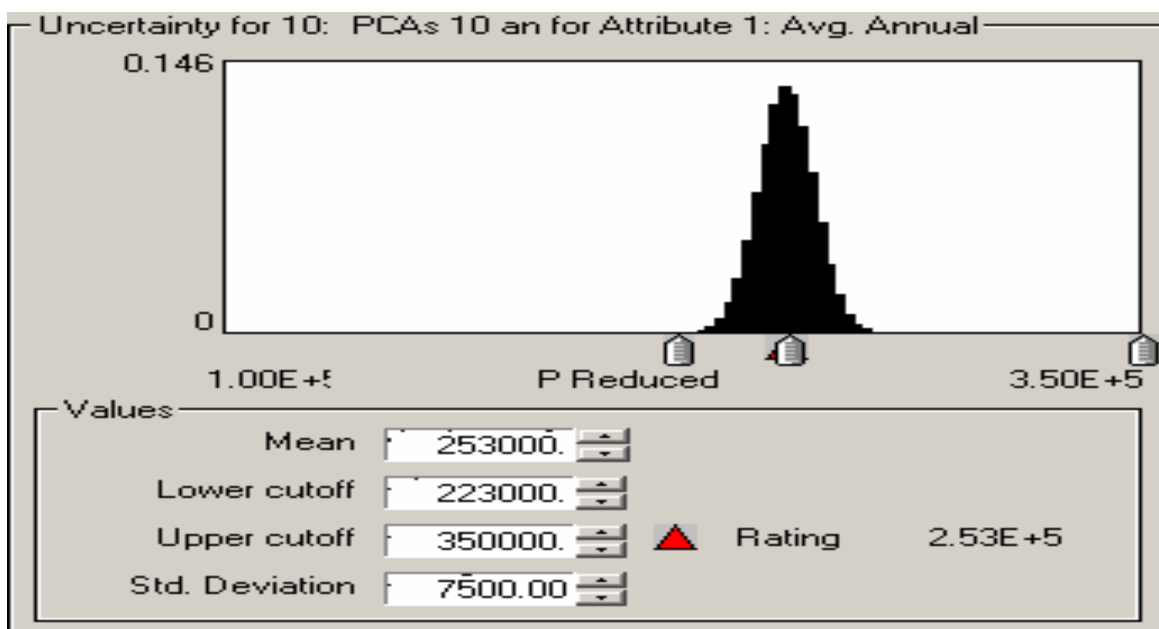
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 8: PCAs 10, 4 and 5



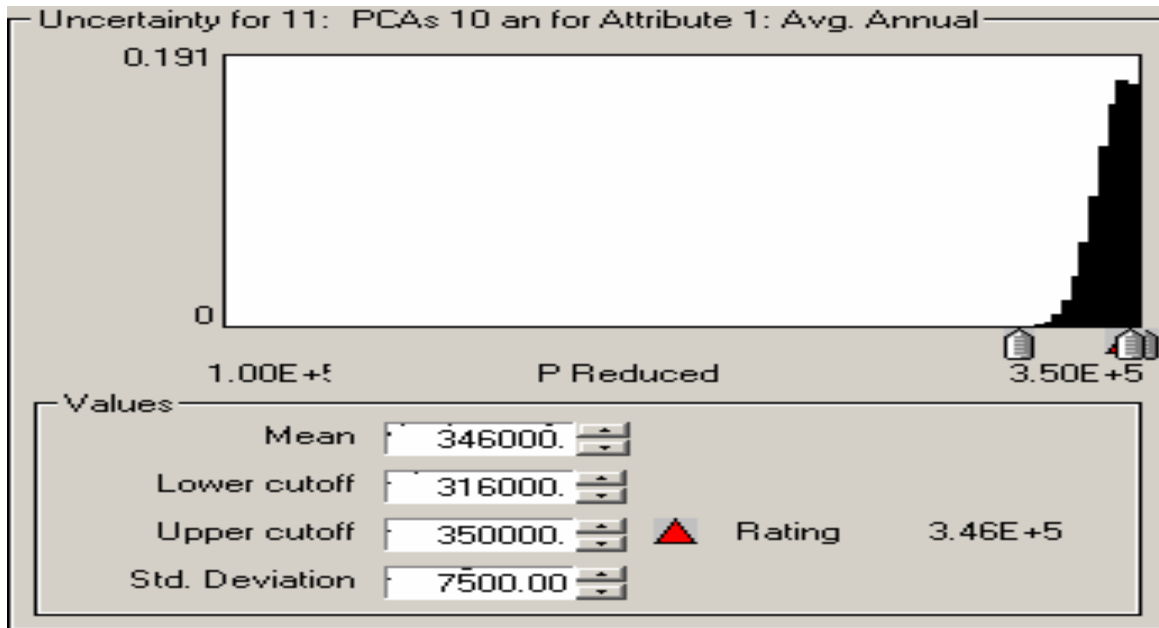
**Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 9: PCAs 10 and 1**



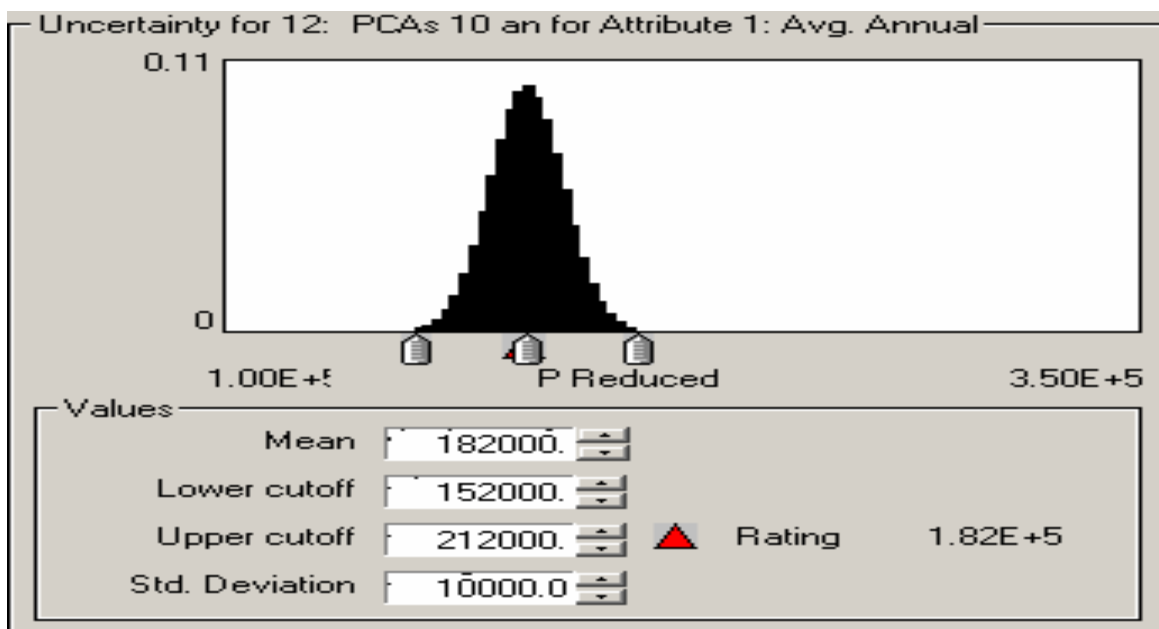
**Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 10: PCAs 10 and 2**



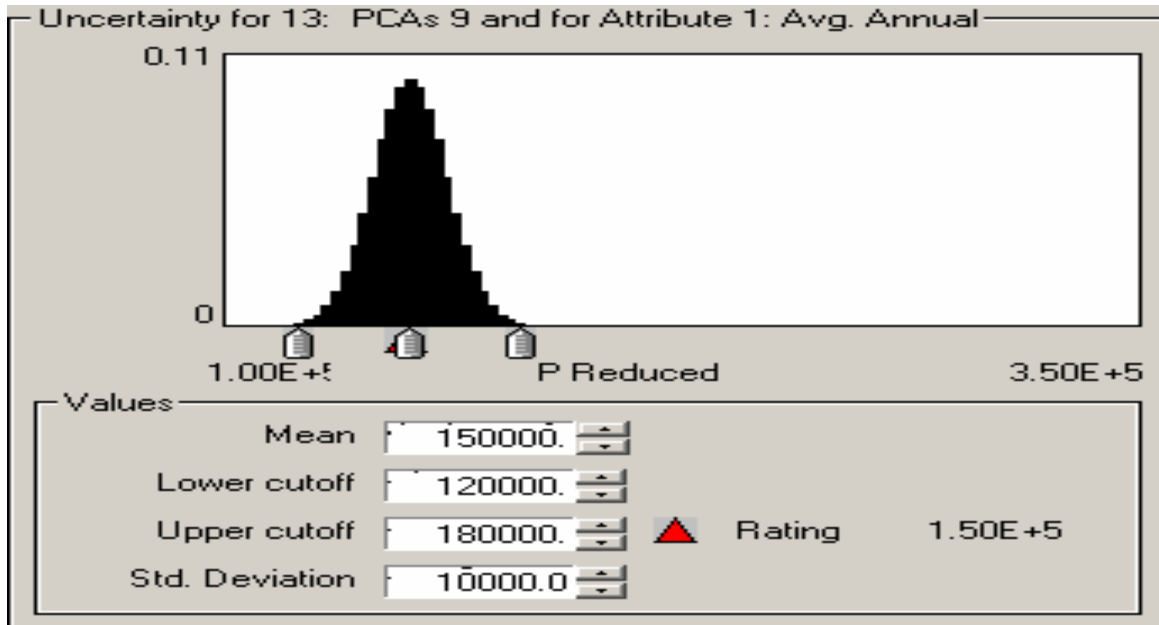
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 11: PCAs 10 and 3



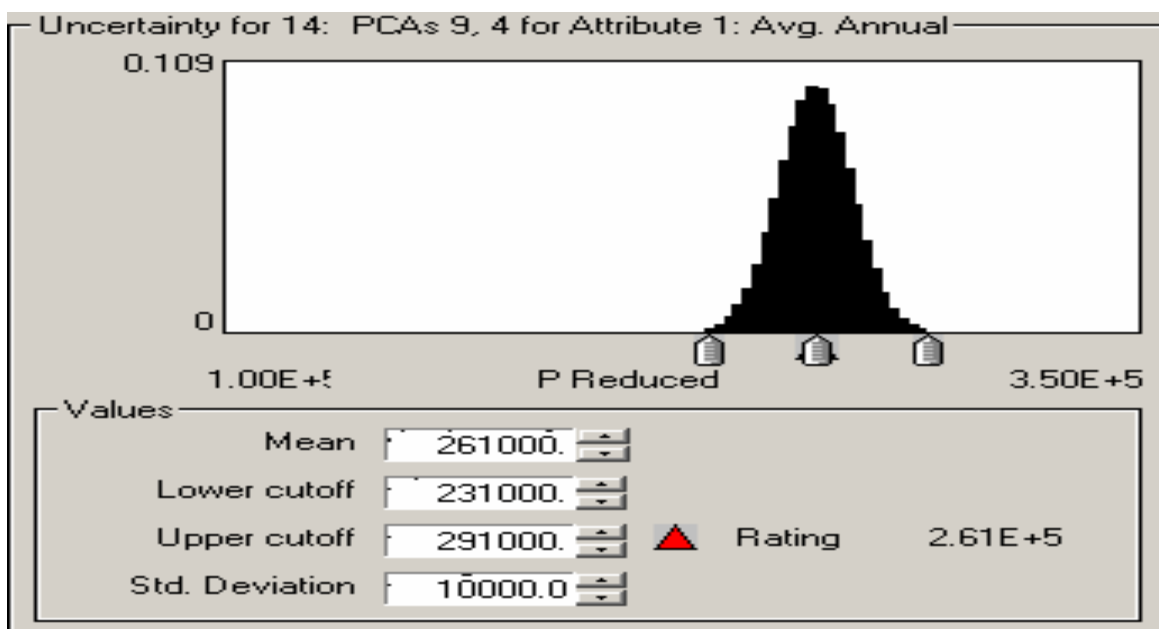
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 12: PCAs 10 and 6



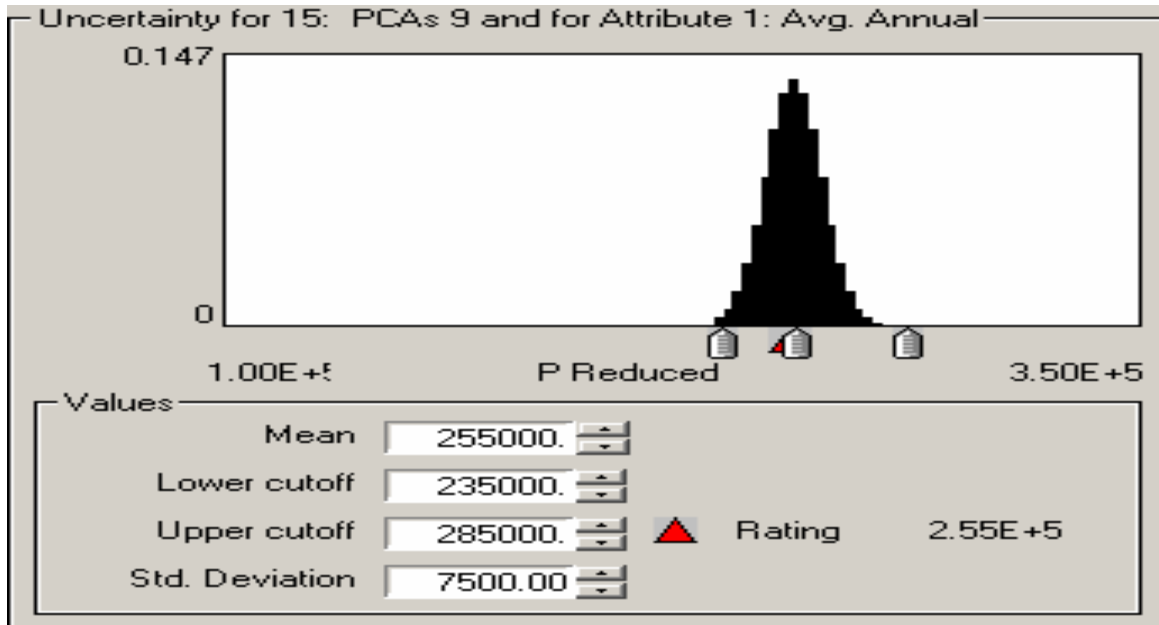
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 13: PCAs 9 and 11



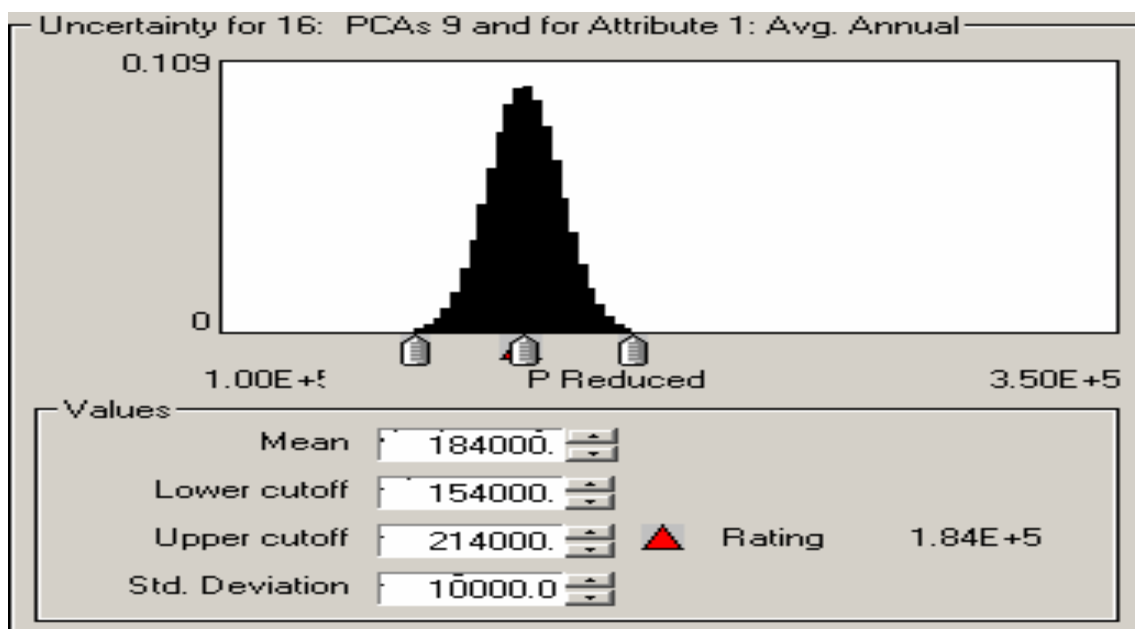
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 14: PCAs 9, 4 and 5



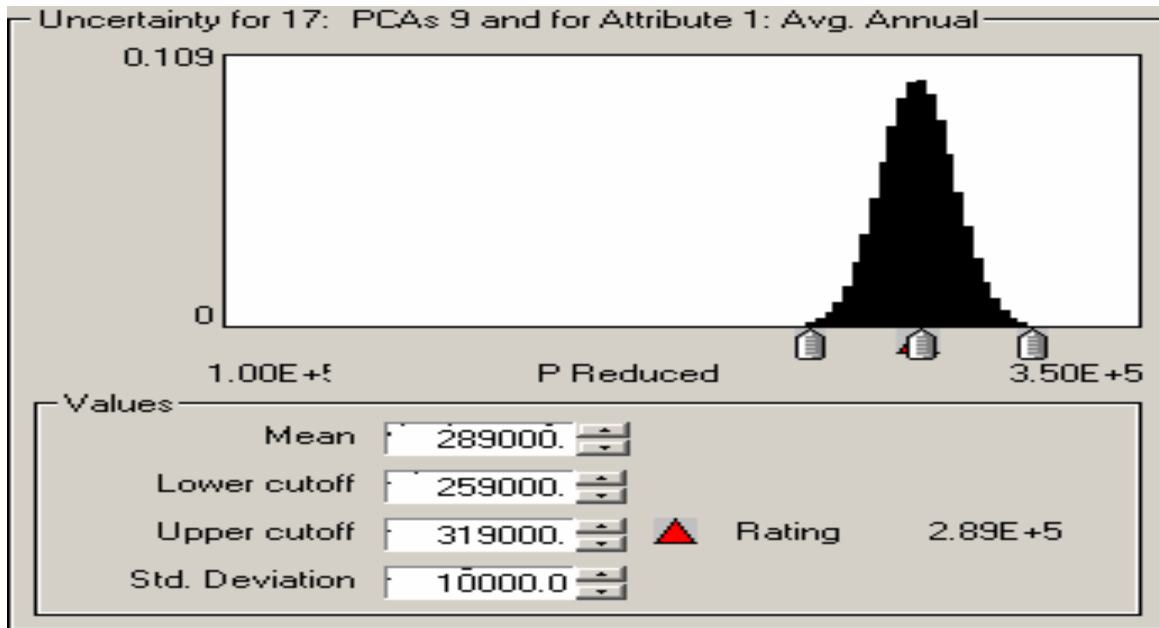
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 15: PCAs 9 and 1



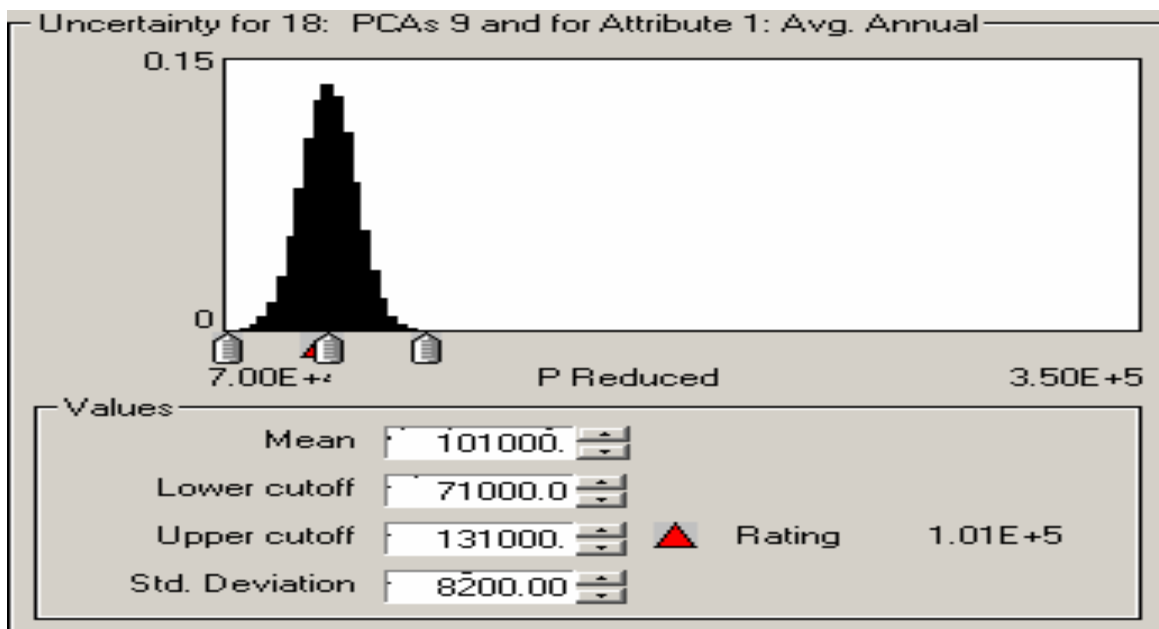
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 16: PCAs 9 and 2



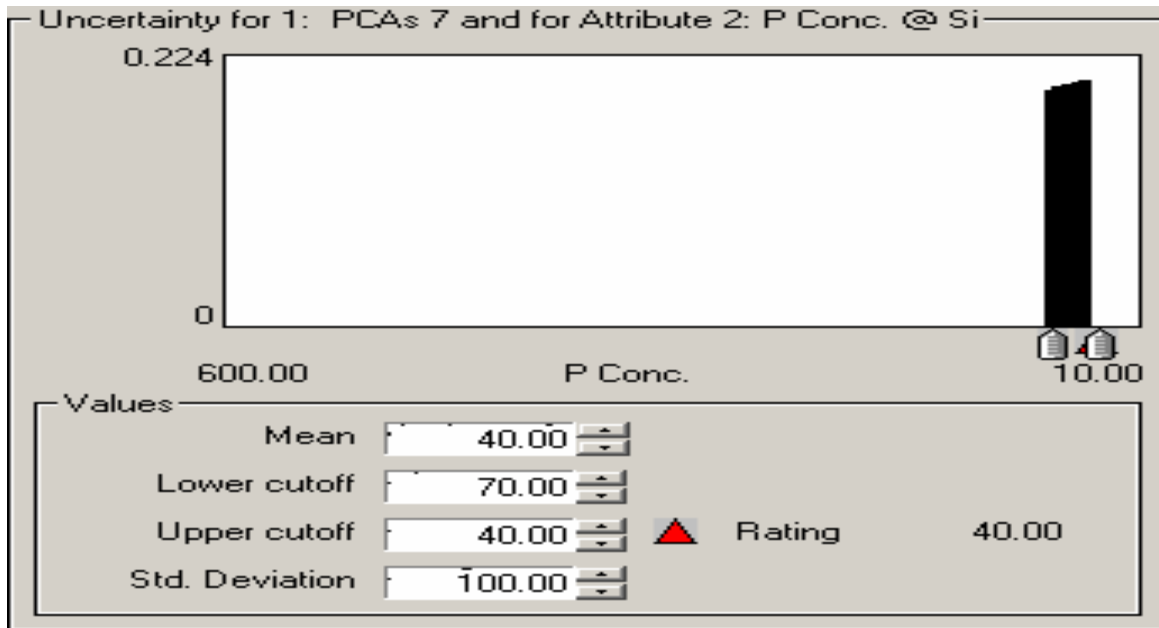
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 17: PCAs 9 and 3



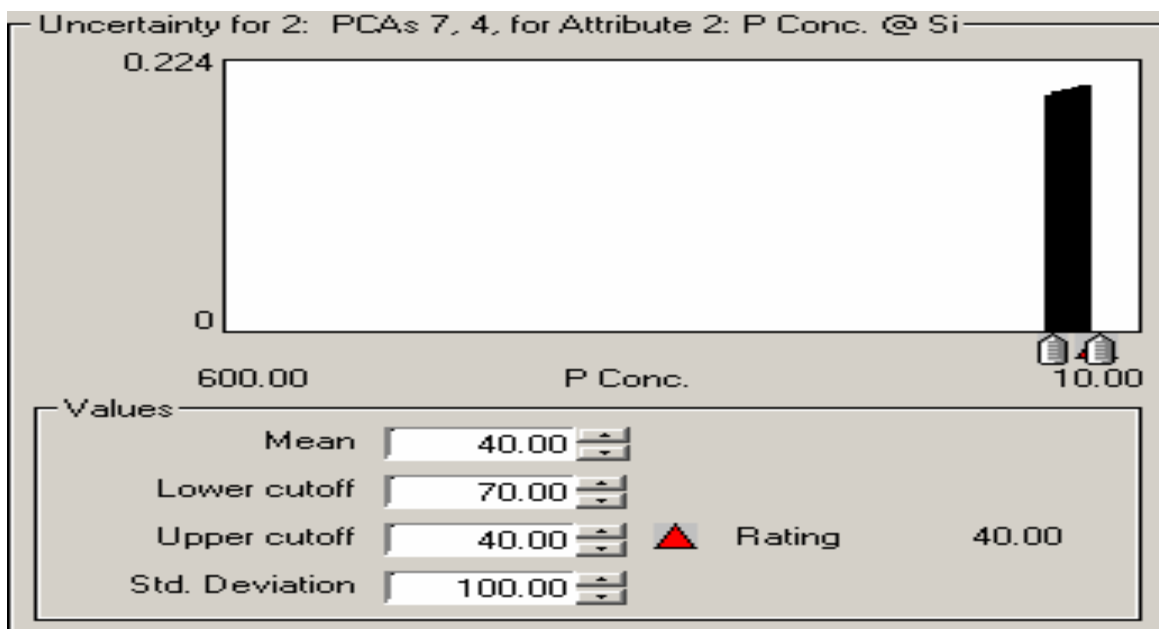
Criteria 1: Average Annual Reduction in Phosphorus Load in Pounds
Combination 18: PCAs 9 and 6



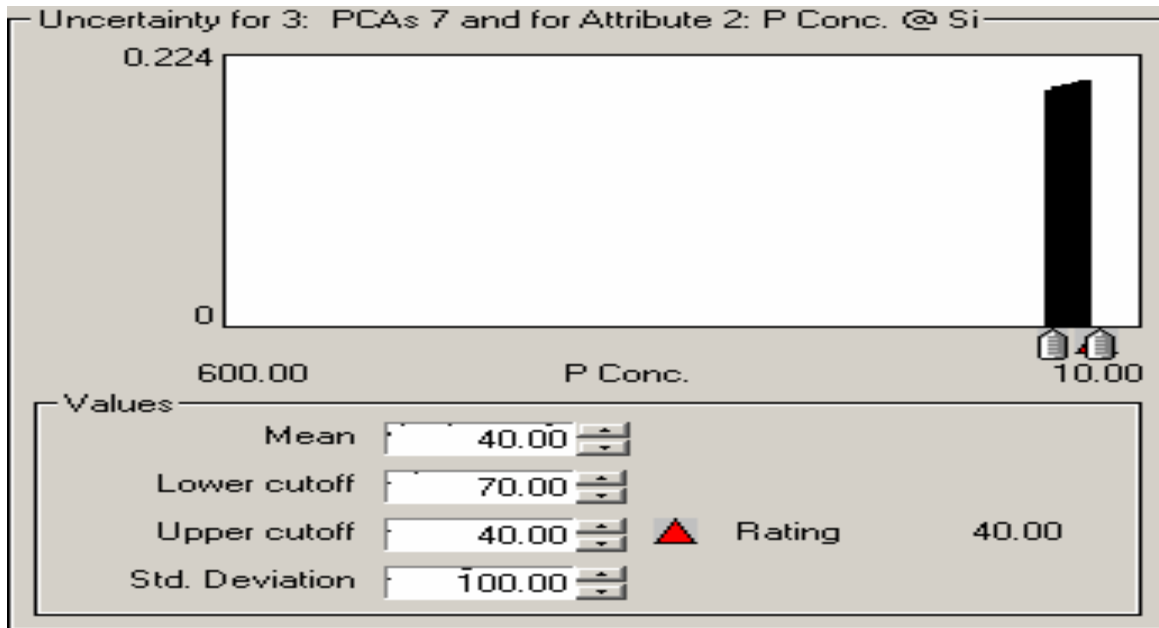
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 1: PCAs 7 and 11



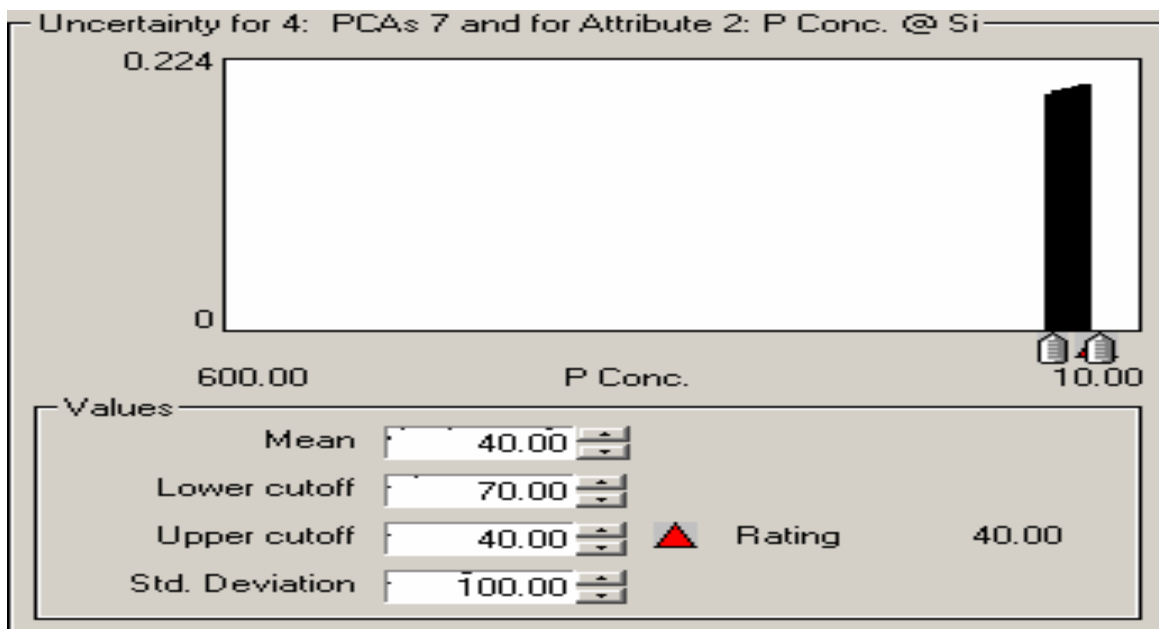
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 2: PCAs 7, 4 and 5



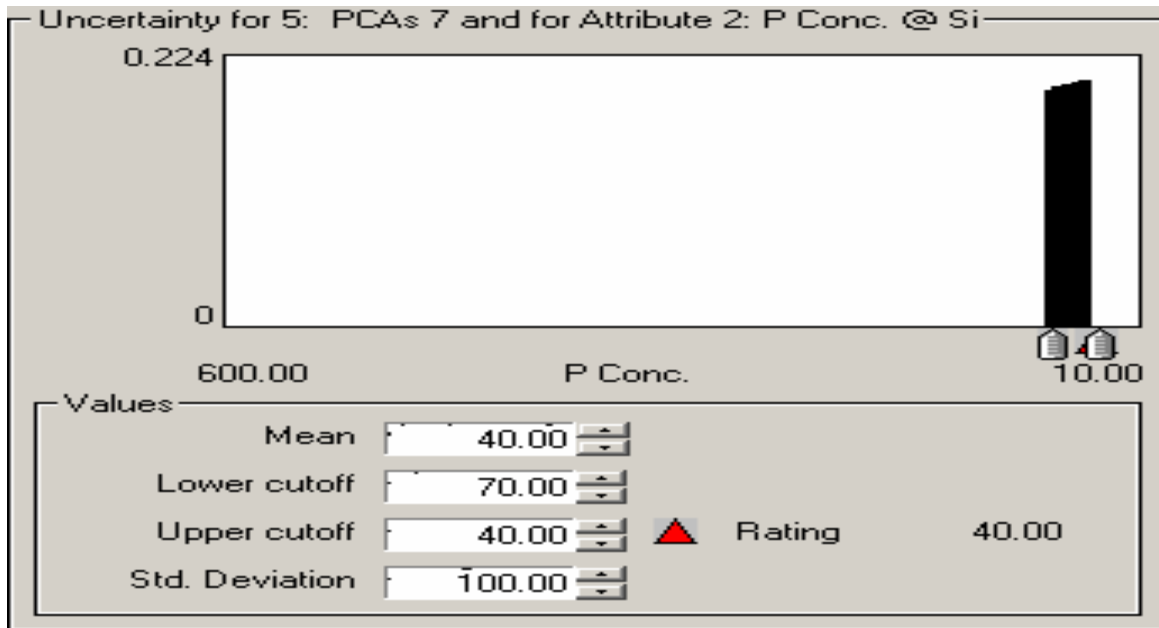
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 3: PCAs 7 and 1



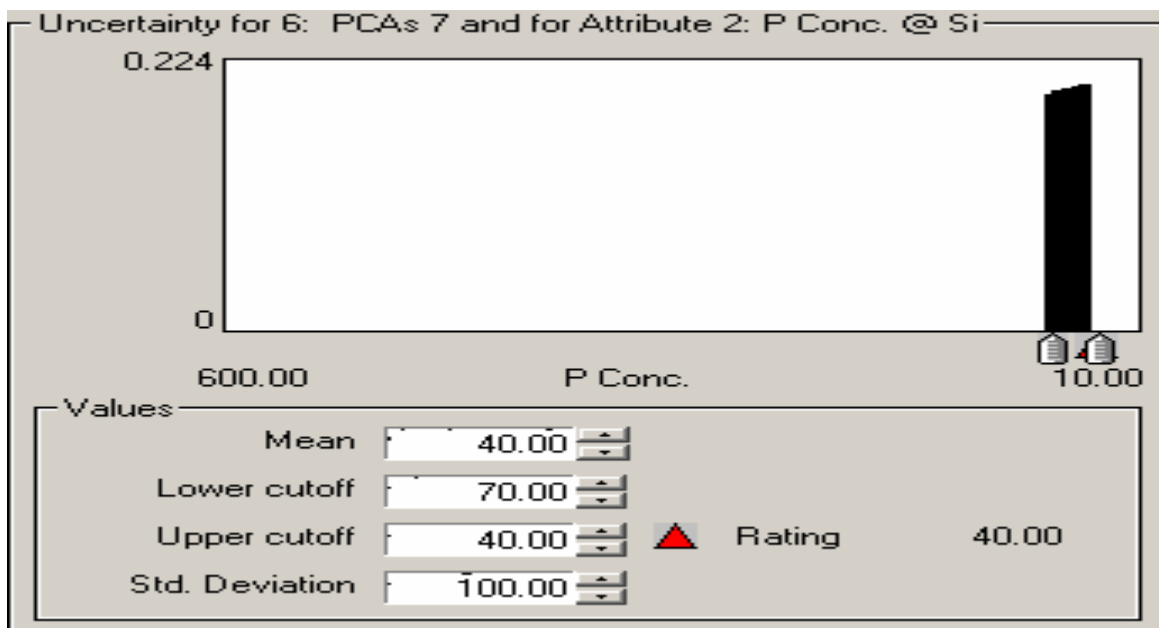
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 4: PCAs 7 and 2



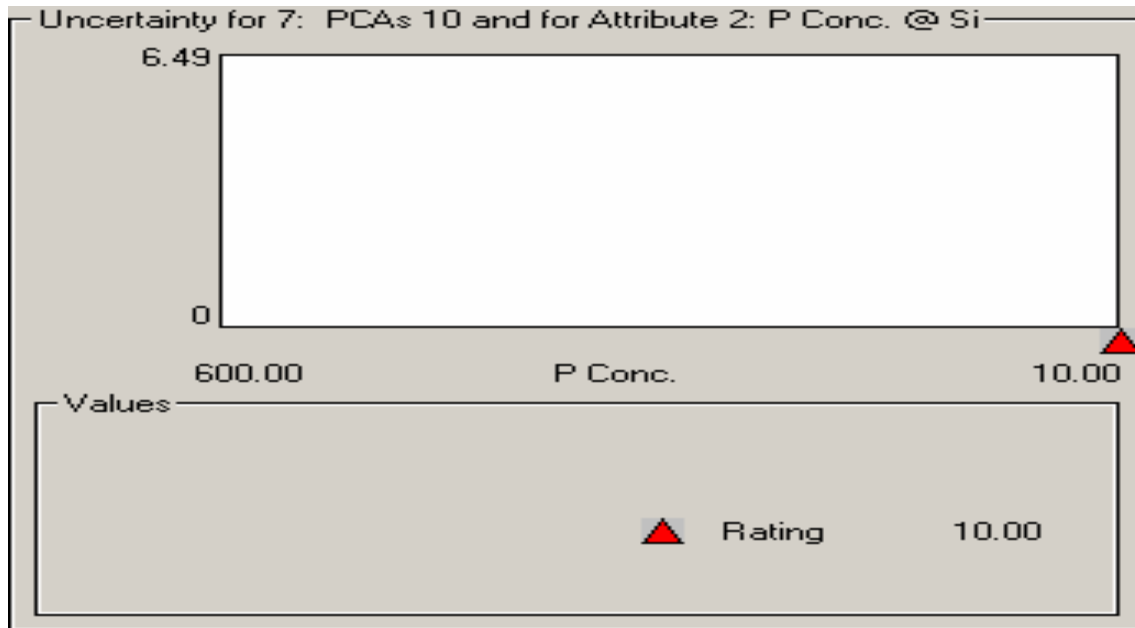
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 5: PCAs 7 and 3



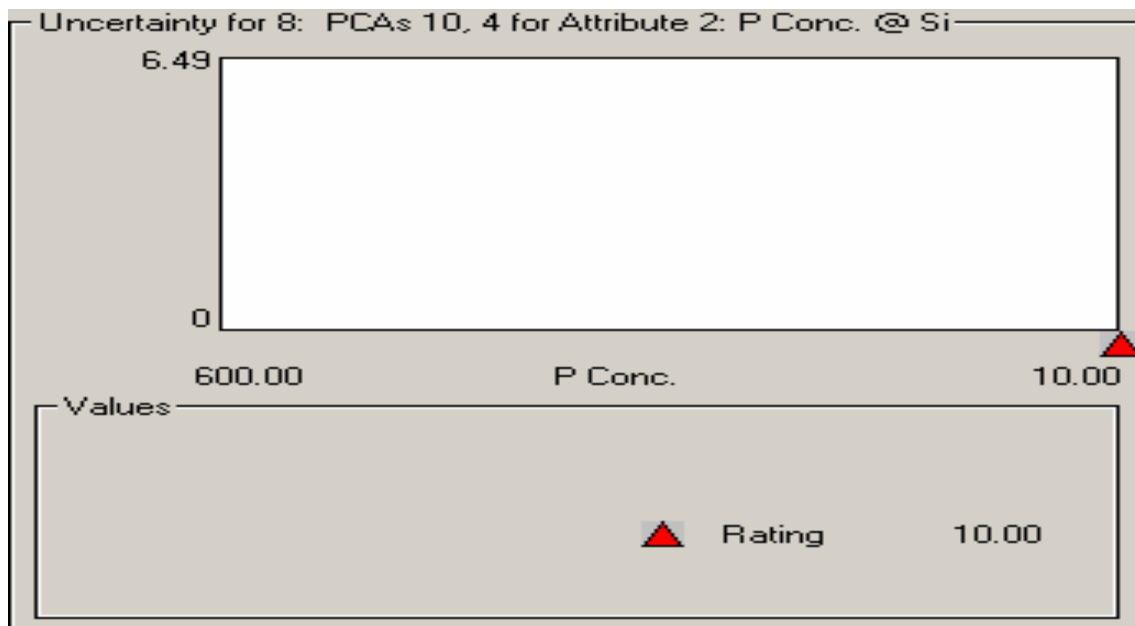
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 6: PCAs 7 and 6



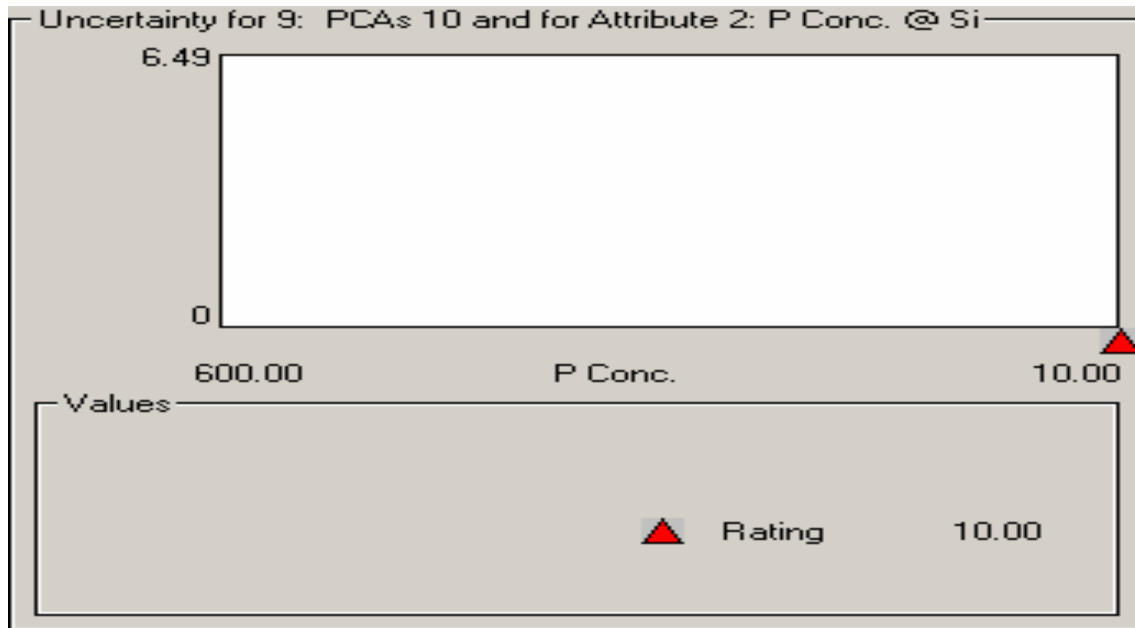
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 7: PCAs 10 and 11



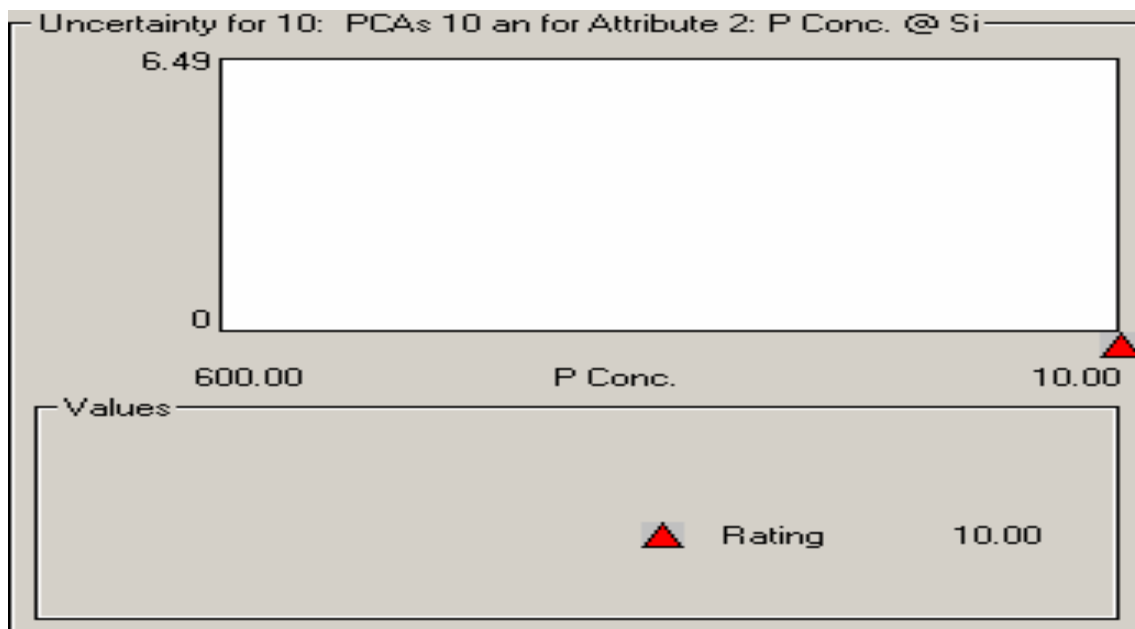
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 8: PCAs 10, 4 and 5



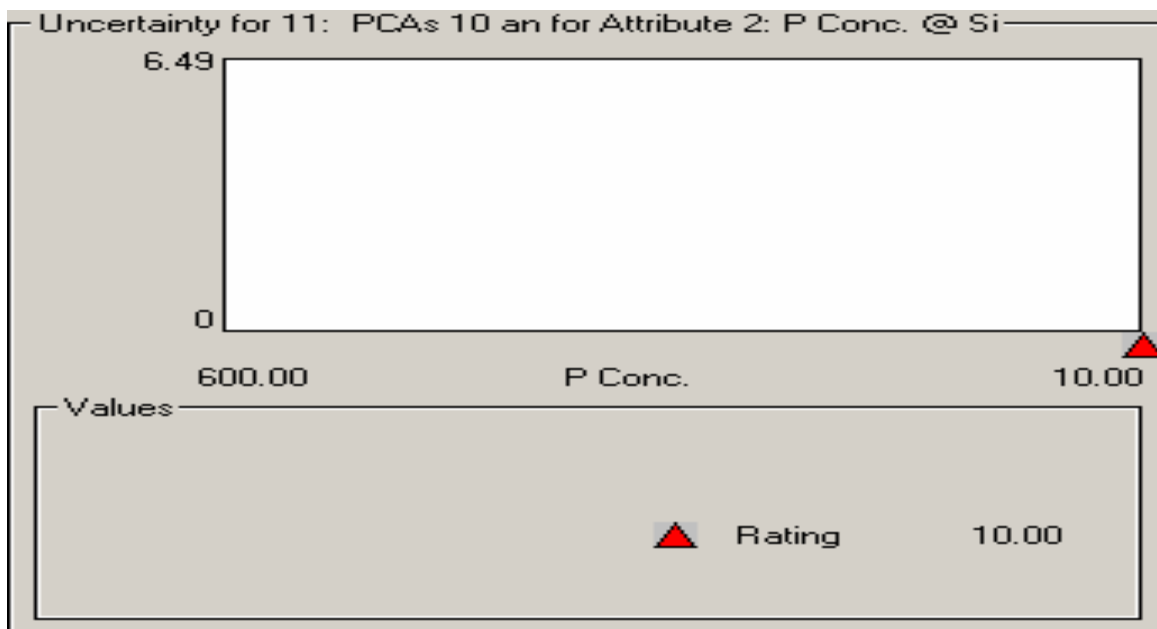
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 9: PCAs 10 and 1



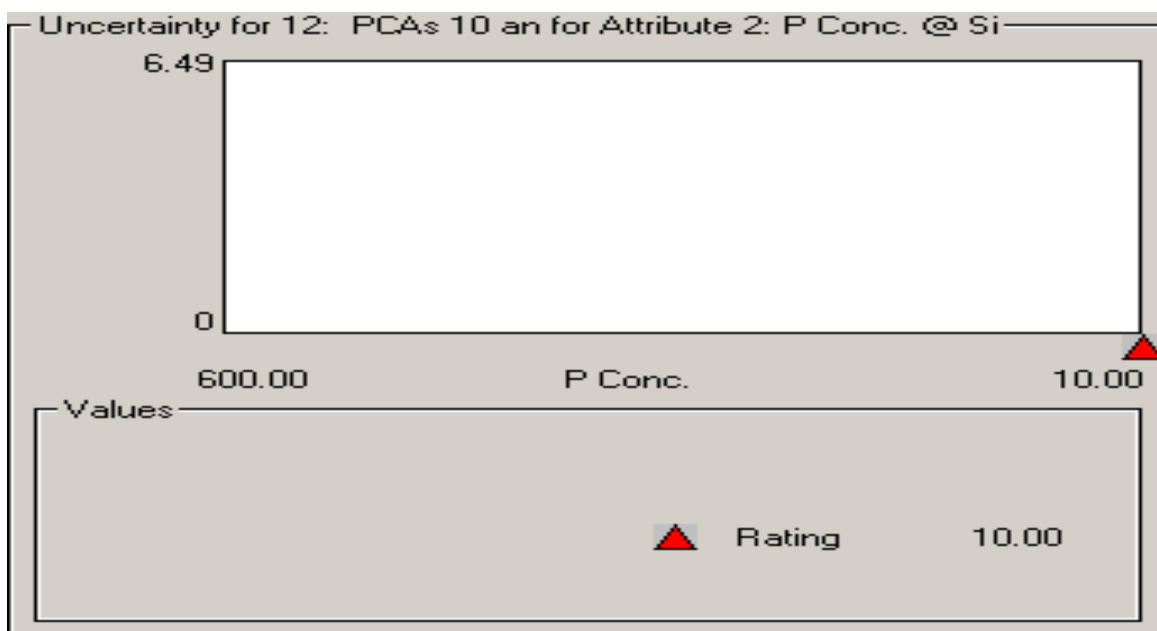
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 10: PCAs 10 and 2



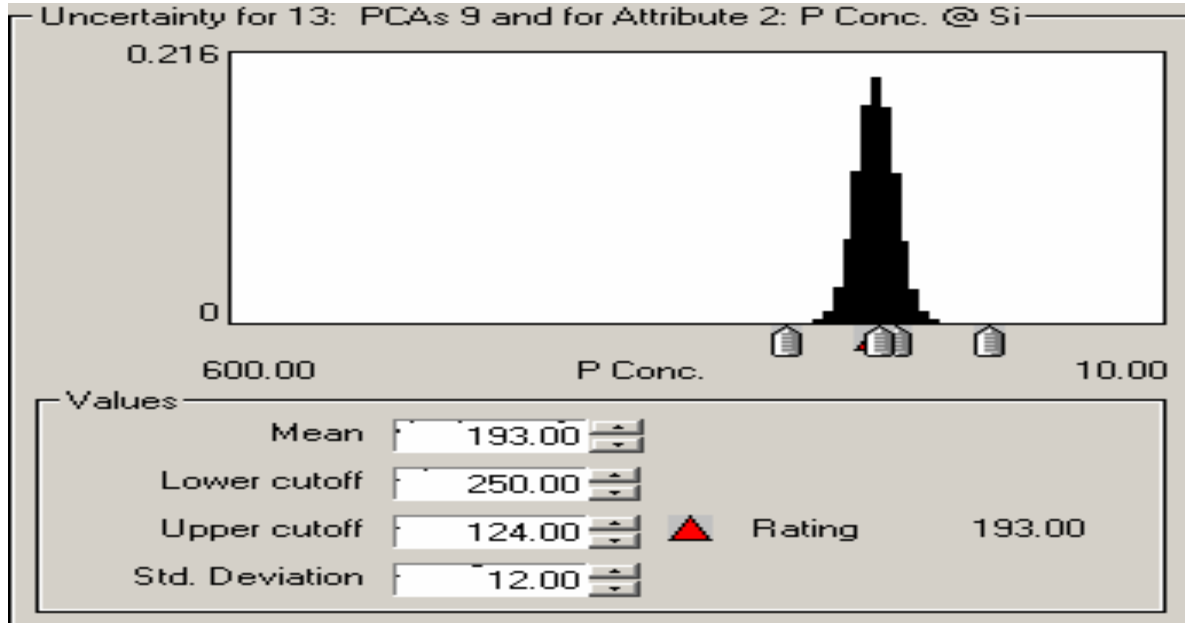
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 11: PCAs 10 and 3



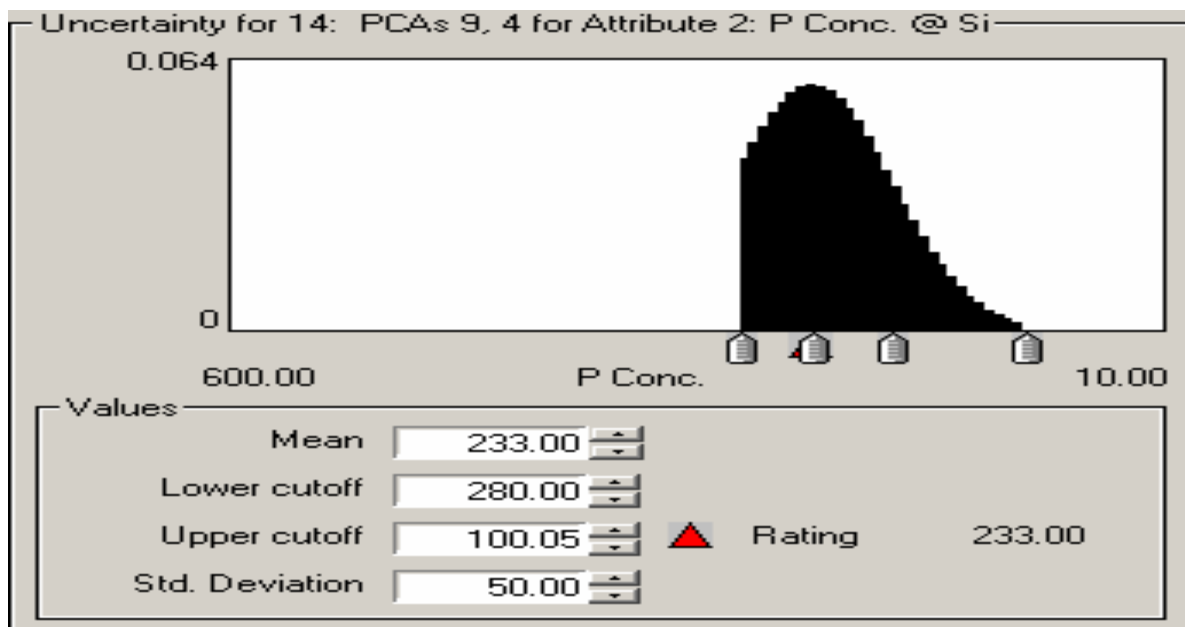
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 12: PCAs 10 and 6



**Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 13: PCAs 9 and 11**

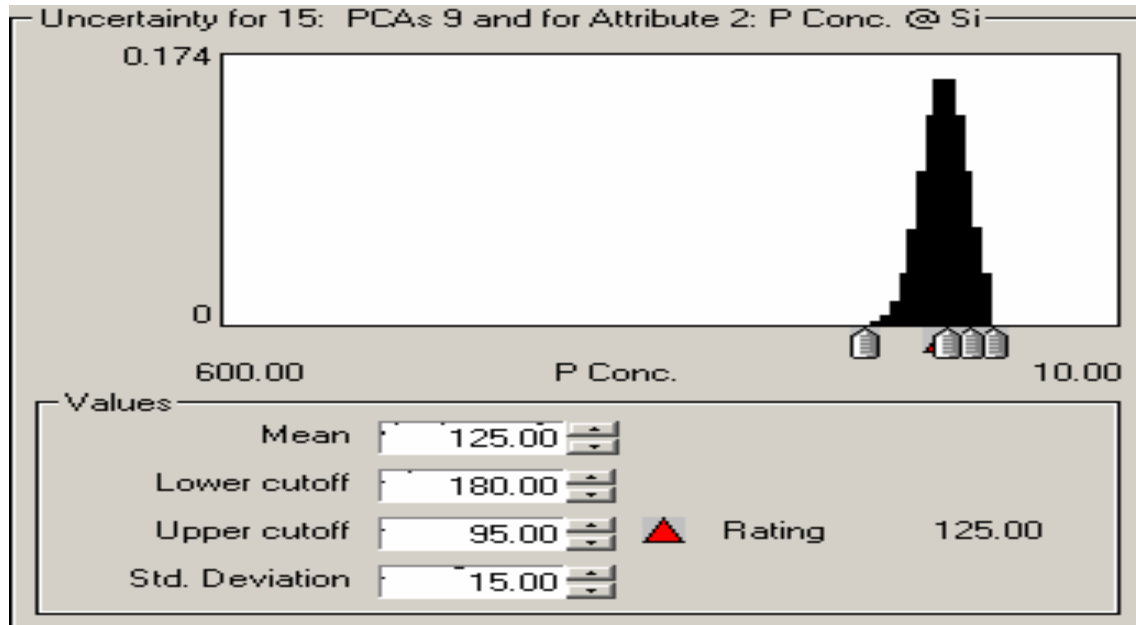


**Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 14: PCAs 9, 4 and 5**



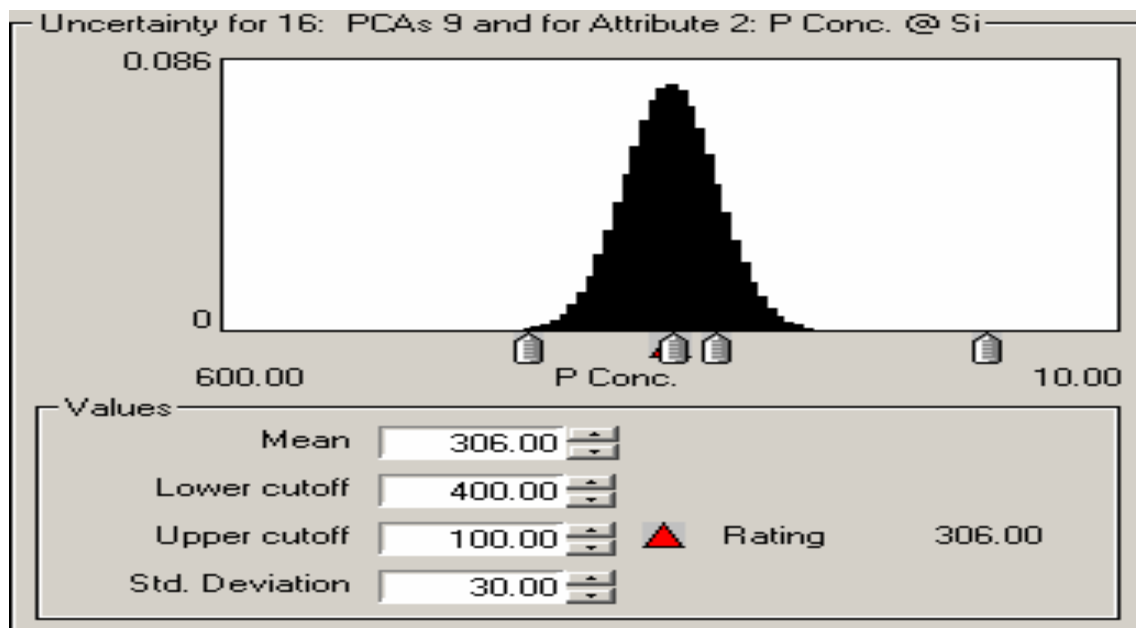
Similar to PCA 5 Distribution

Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 15: PCAs 9 and 1



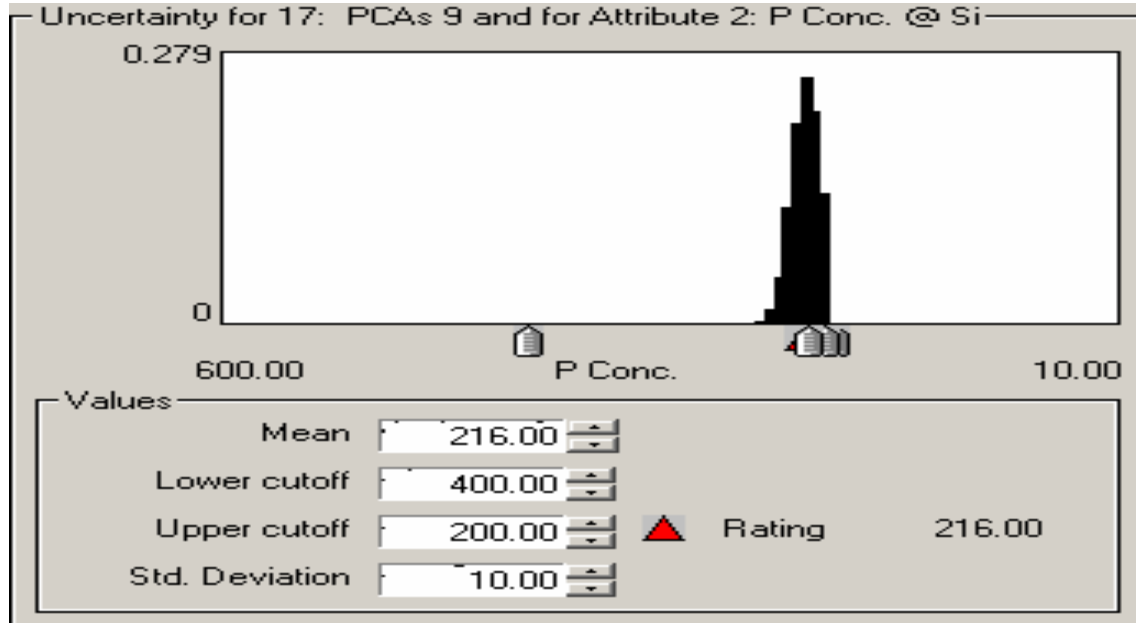
Based on PCA 1 Distribution

Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 16: PCAs 9 and 2



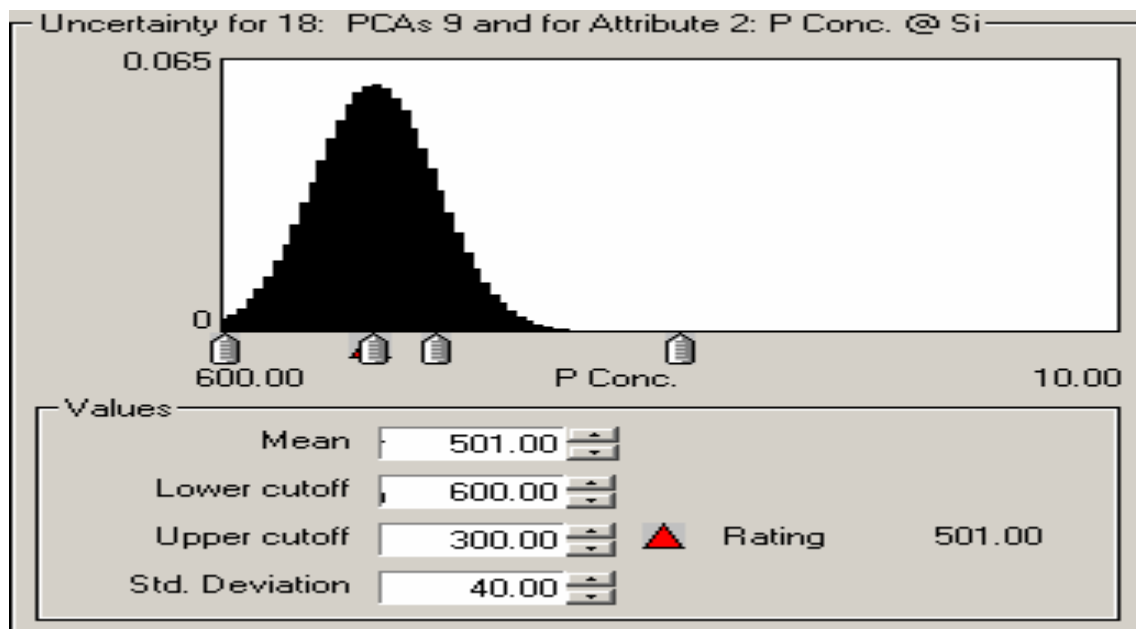
Based on PCA 2 Distribution

Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 17: PCAs 9 and 3

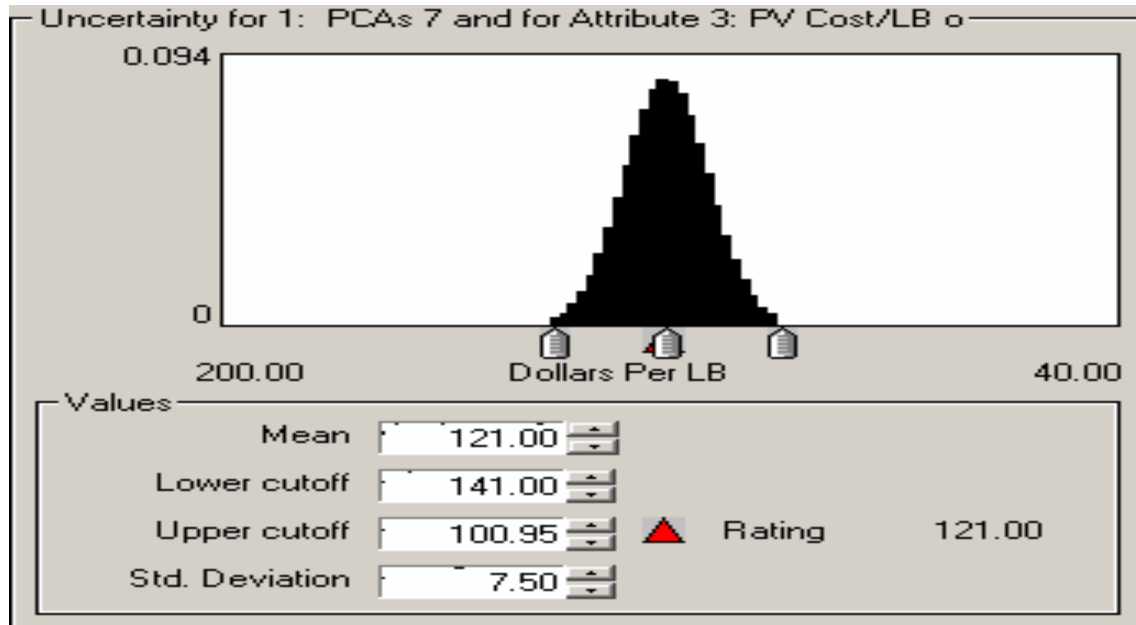


Based on PCA 3 distribution

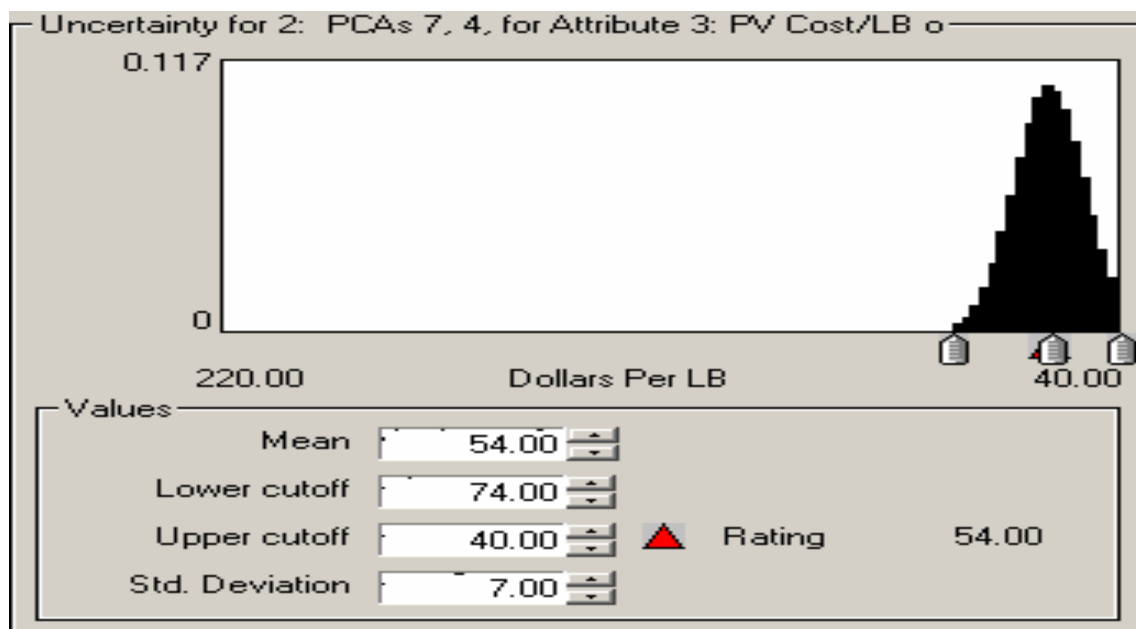
Criterion 2: Phosphorus Concentration After Treatment in ppb
Combination 18: PCAs 9 and 6



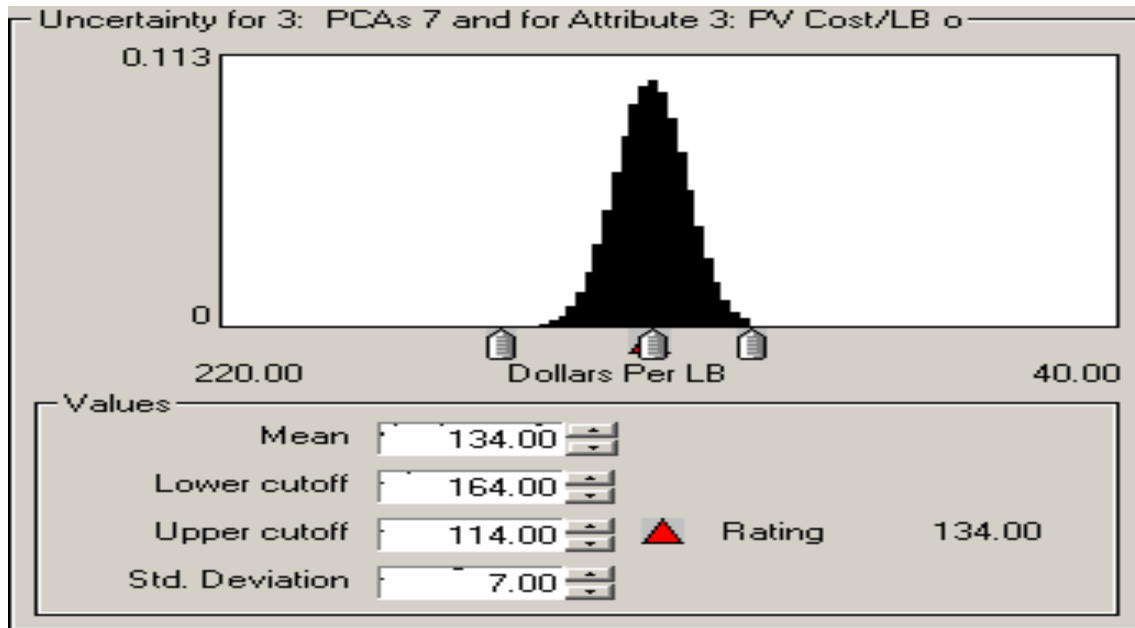
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 1: PCAs 7 and 11



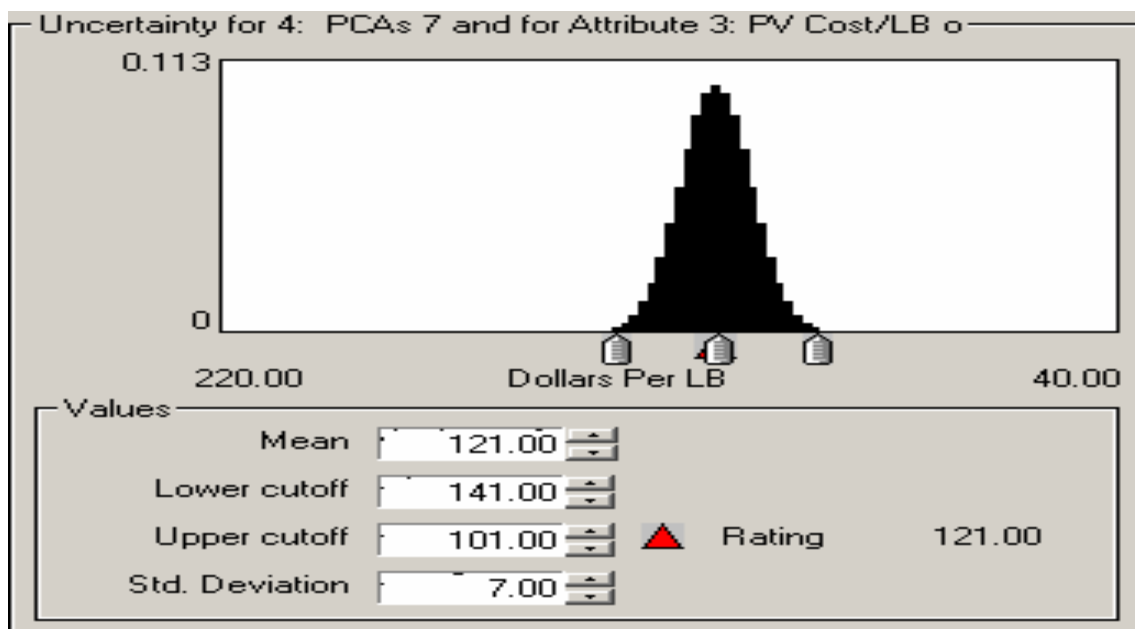
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 2: PCAs 7, 4 and 5



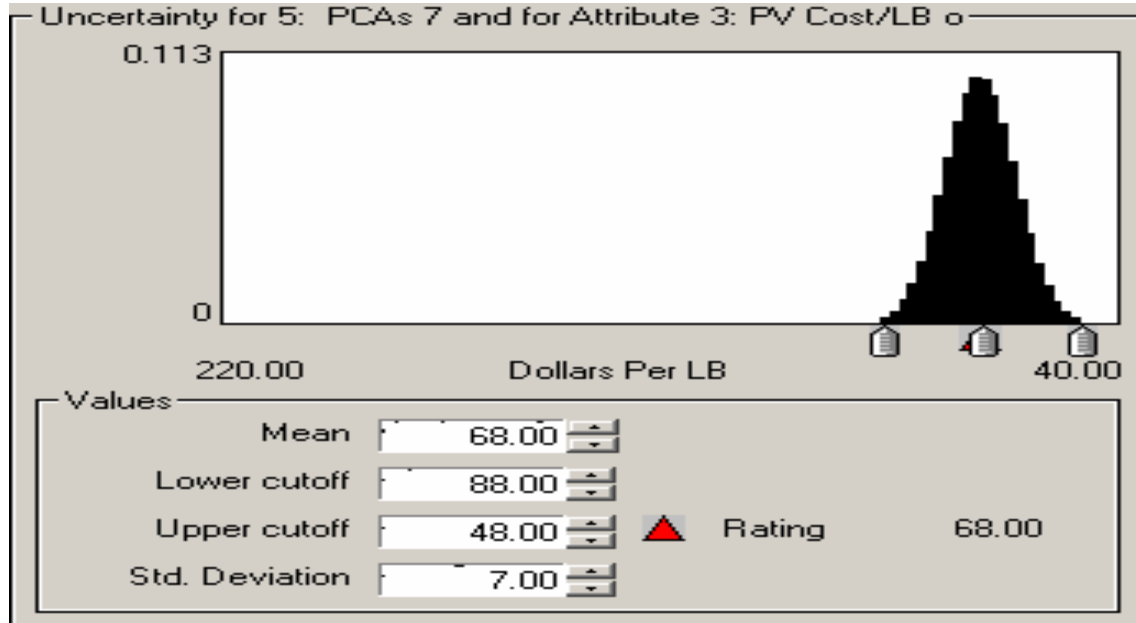
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 3: PCAs 7 and 1



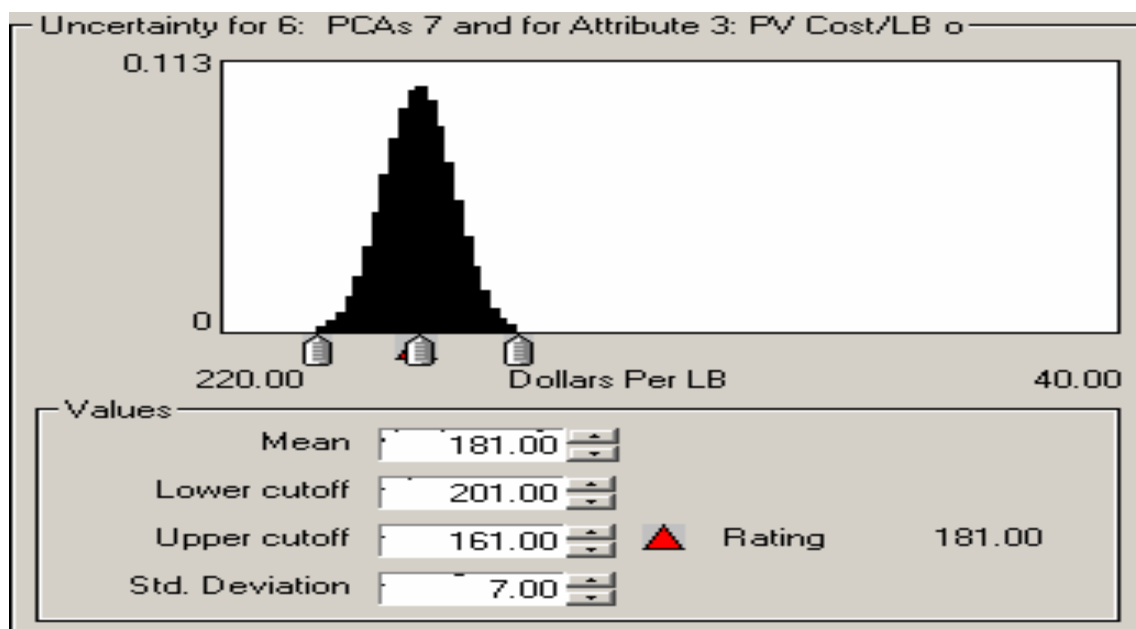
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 4: PCAs 7 and 2



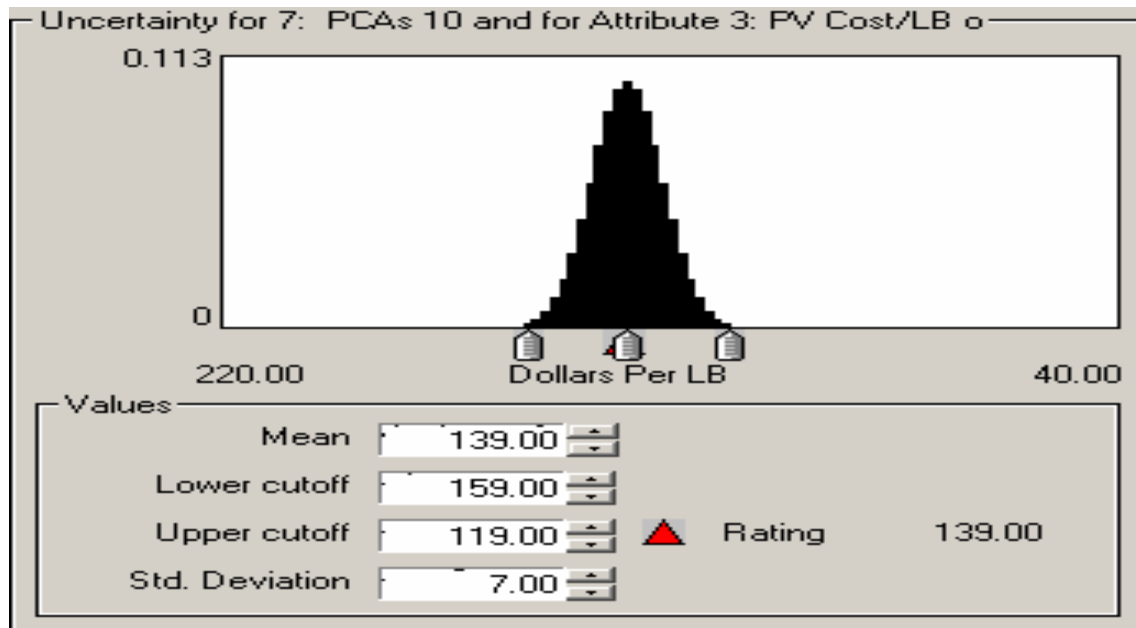
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 5: PCAs 7 and 3



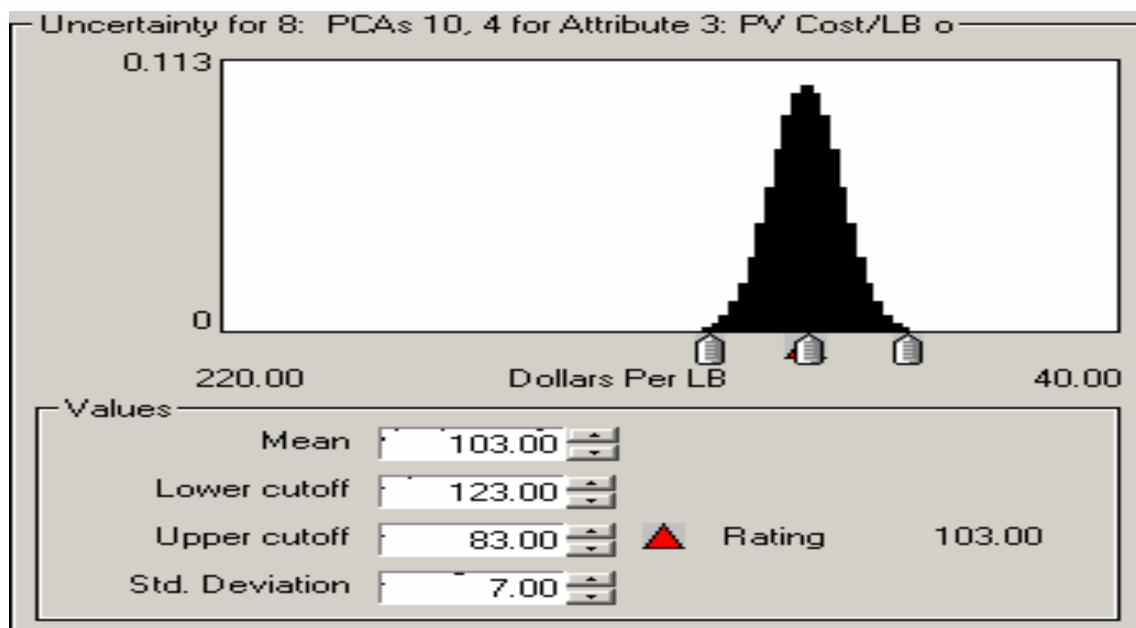
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 6: PCAs 7 and 6



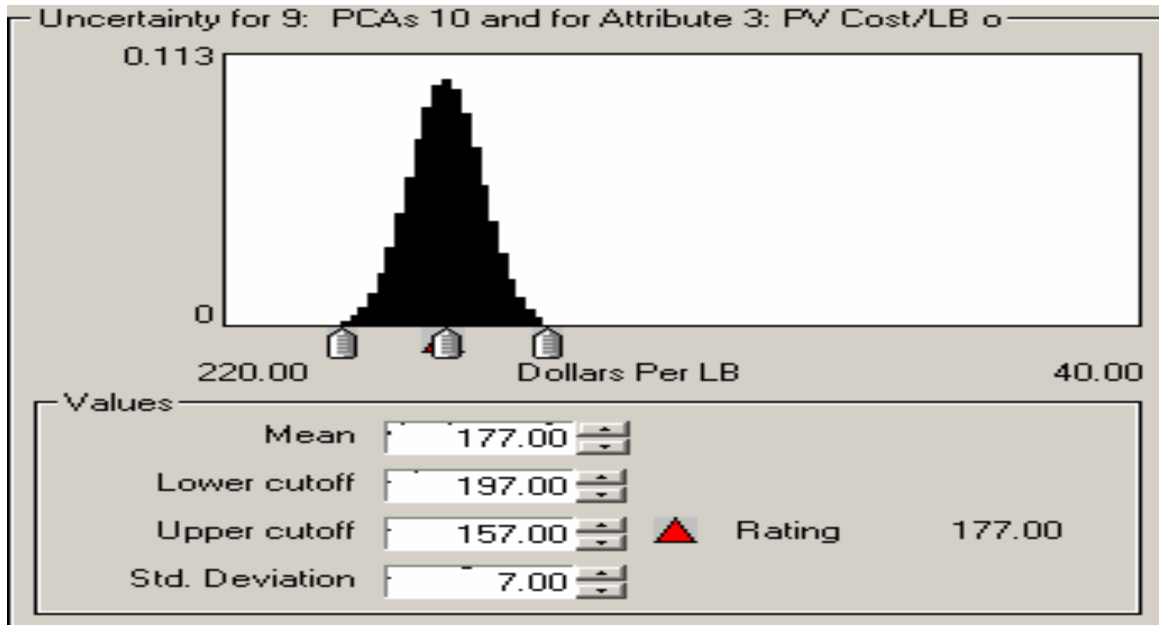
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 7: PCAs 10 and 11



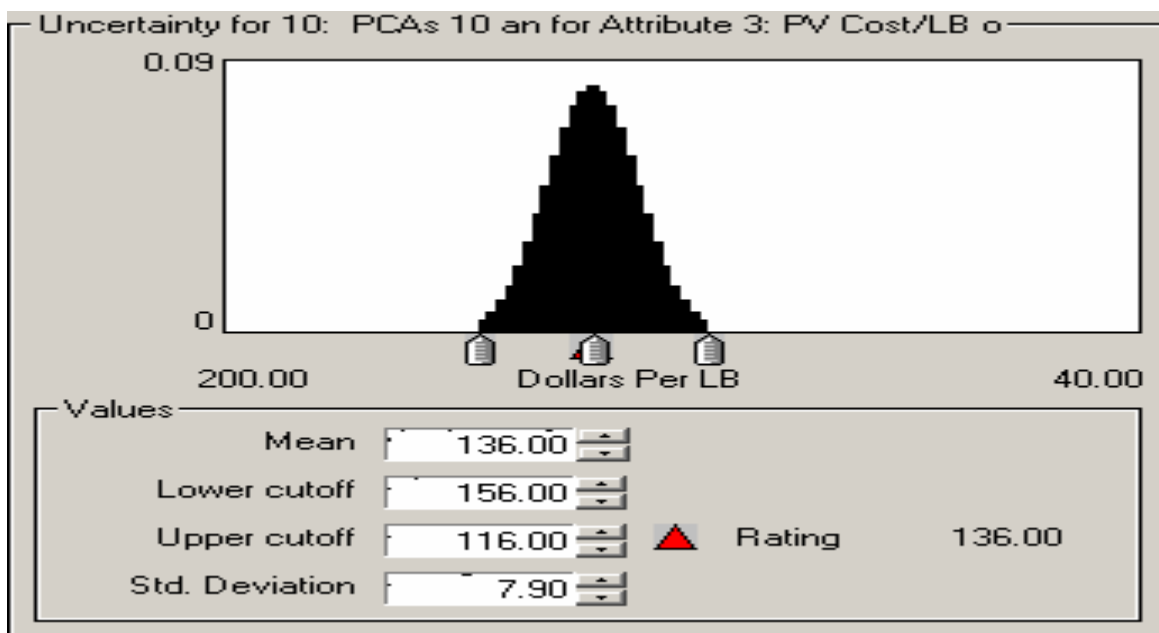
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 8: PCAs 10, 4 and 5



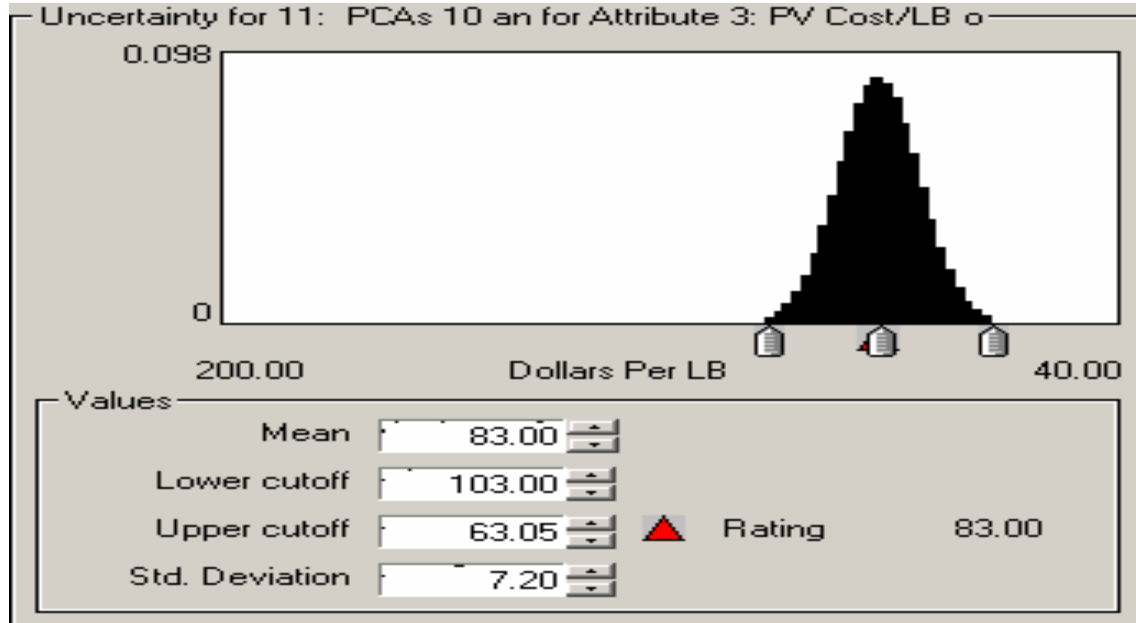
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 9: PCAs 10 and 1



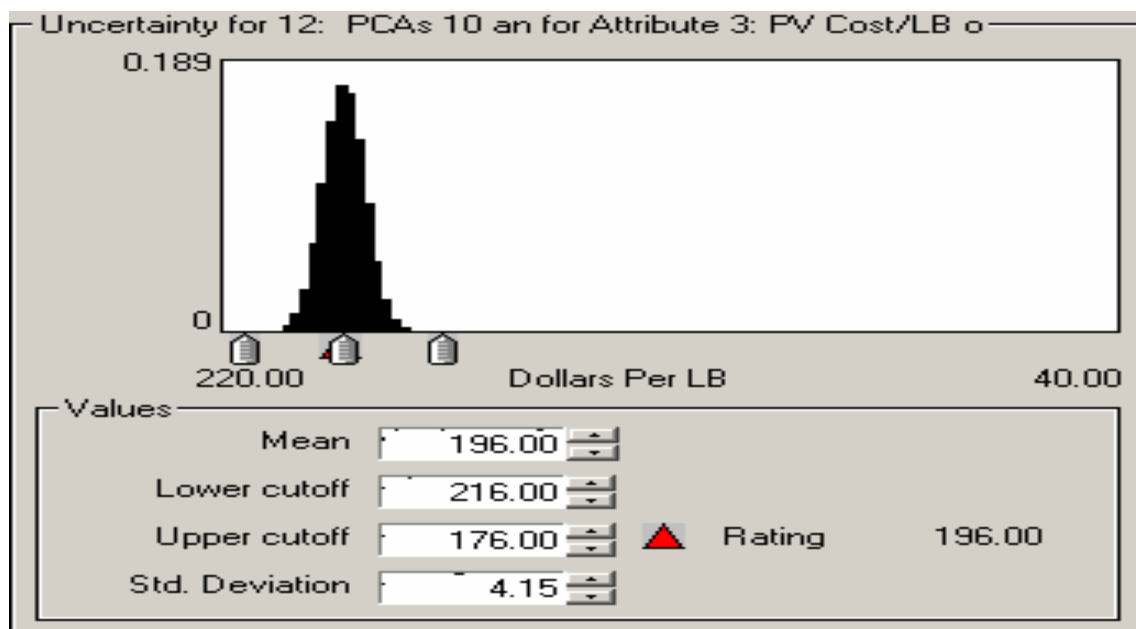
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 10: PCAs 10 and 2



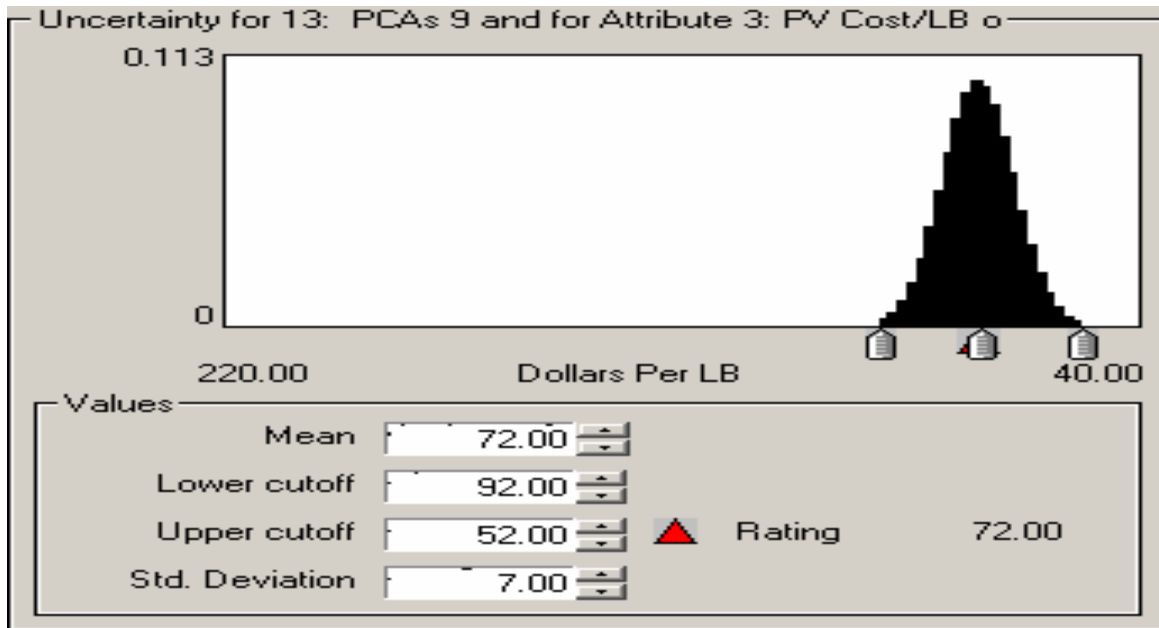
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 11: PCAs 10 and 3



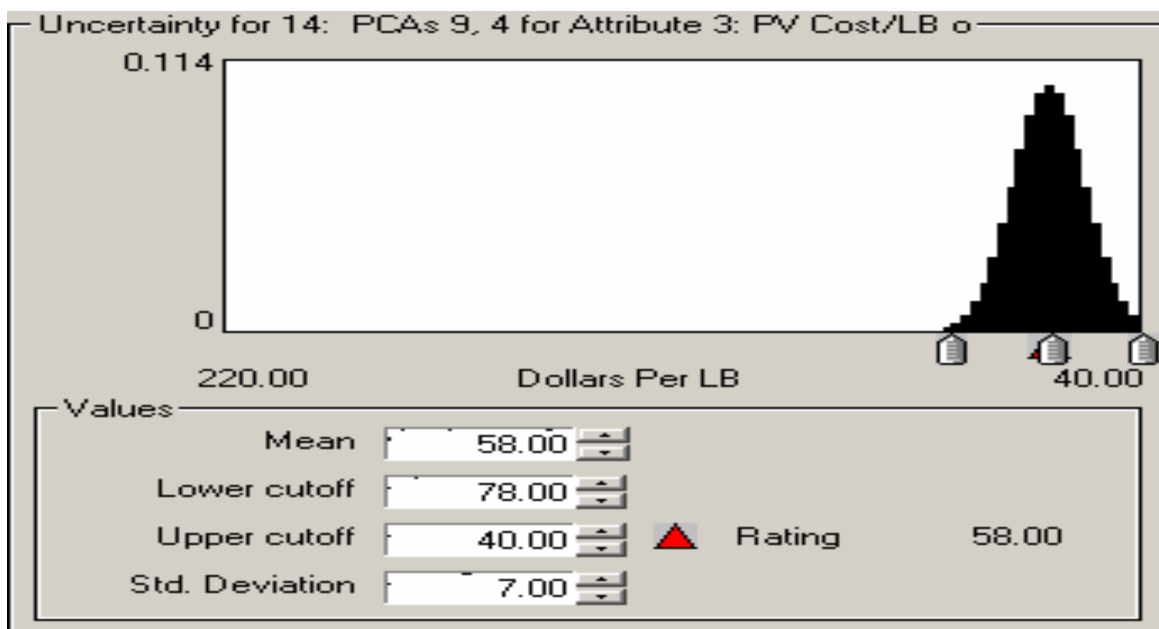
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 12: PCAs 10 and 6



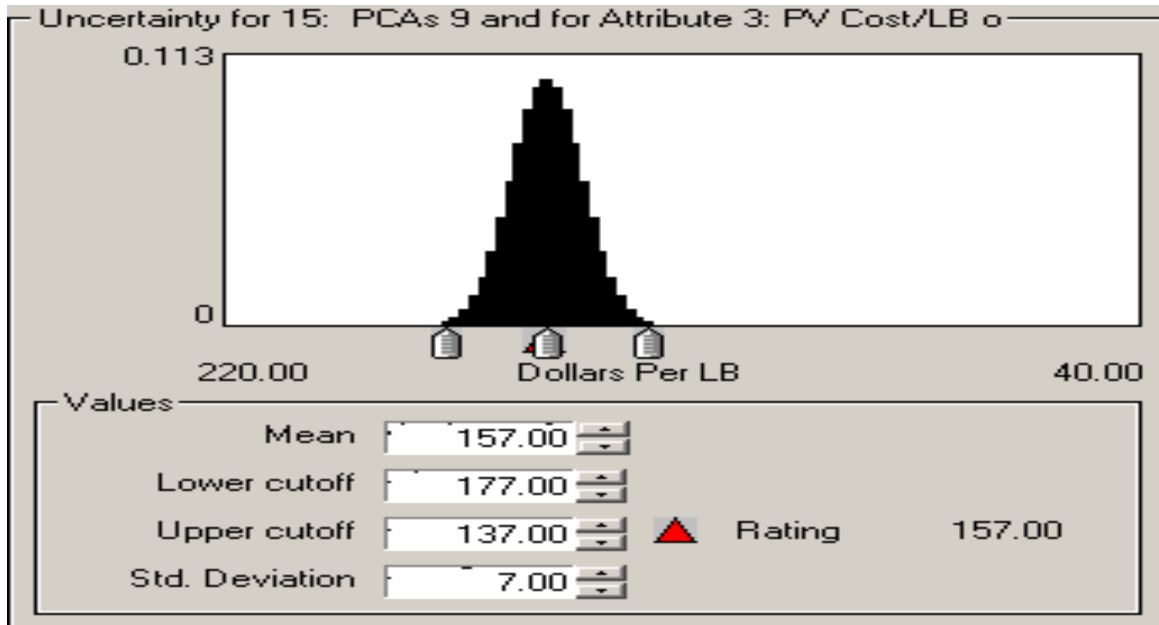
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 13: PCAs 9 and 11



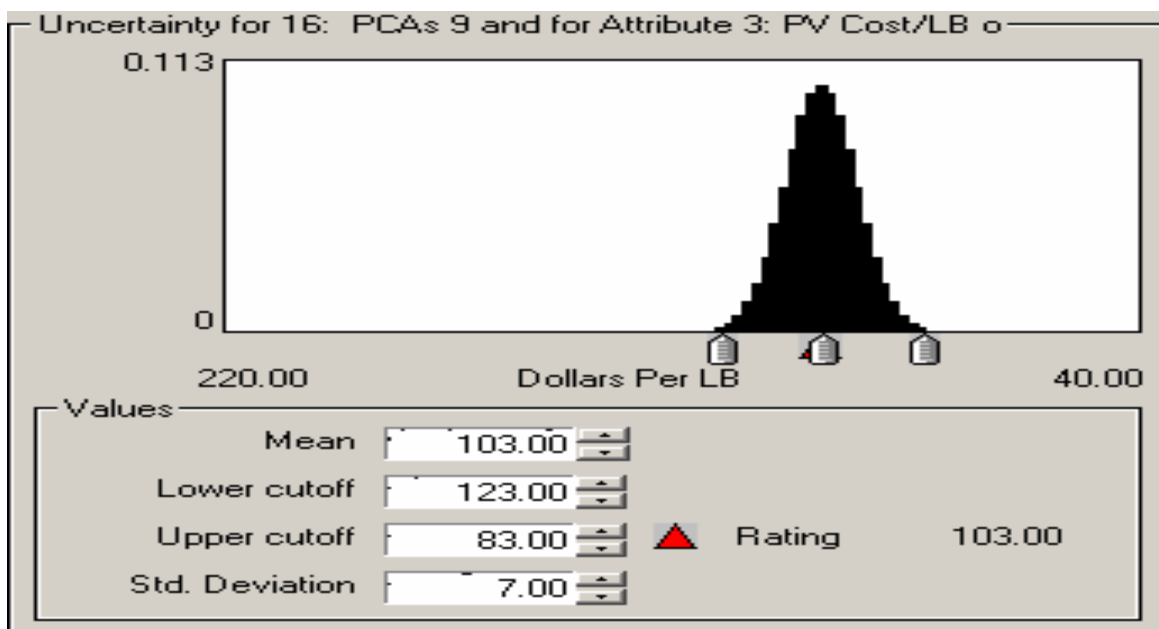
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 14: PCAs 9, 4 and 5



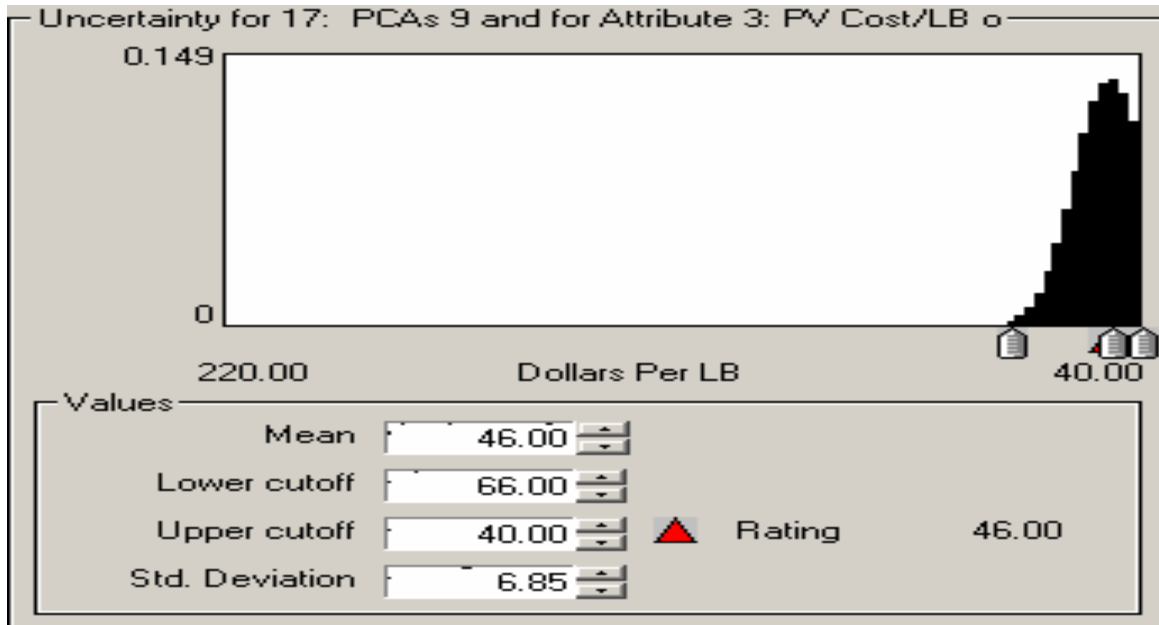
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 15: PCAs 9 and 1



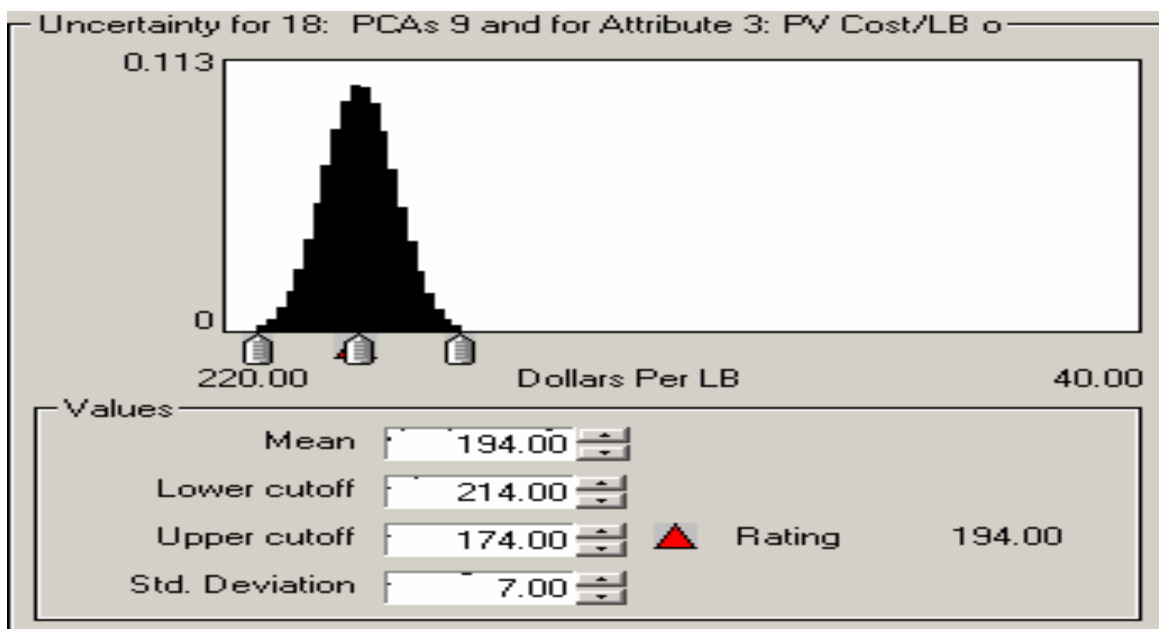
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 16: PCAs 9 and 2



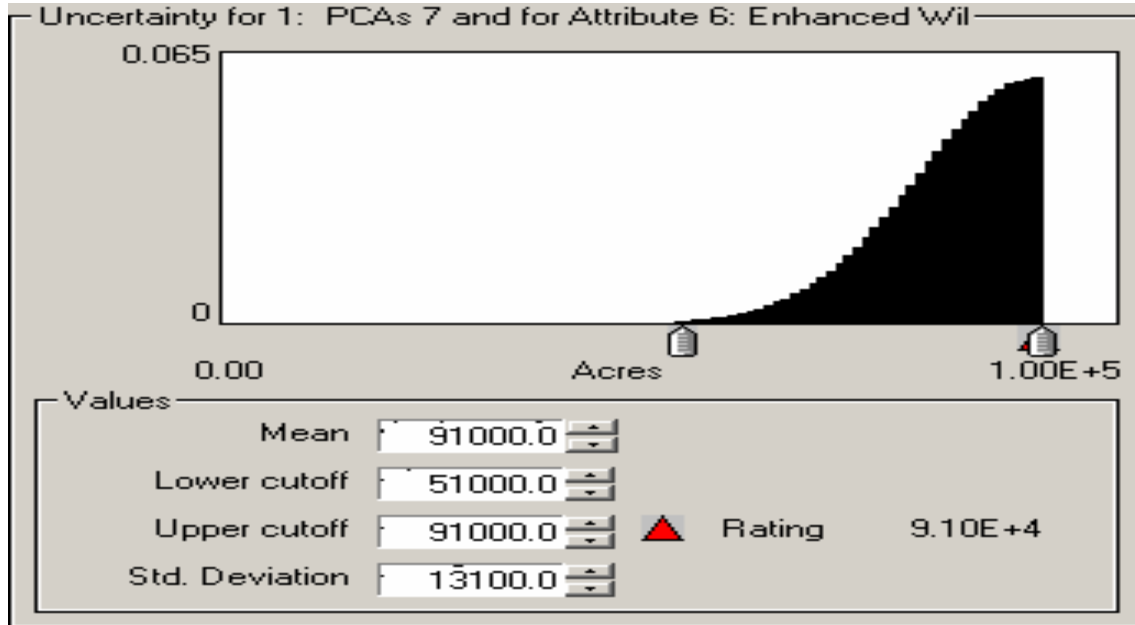
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 17: PCAs 9 and 3



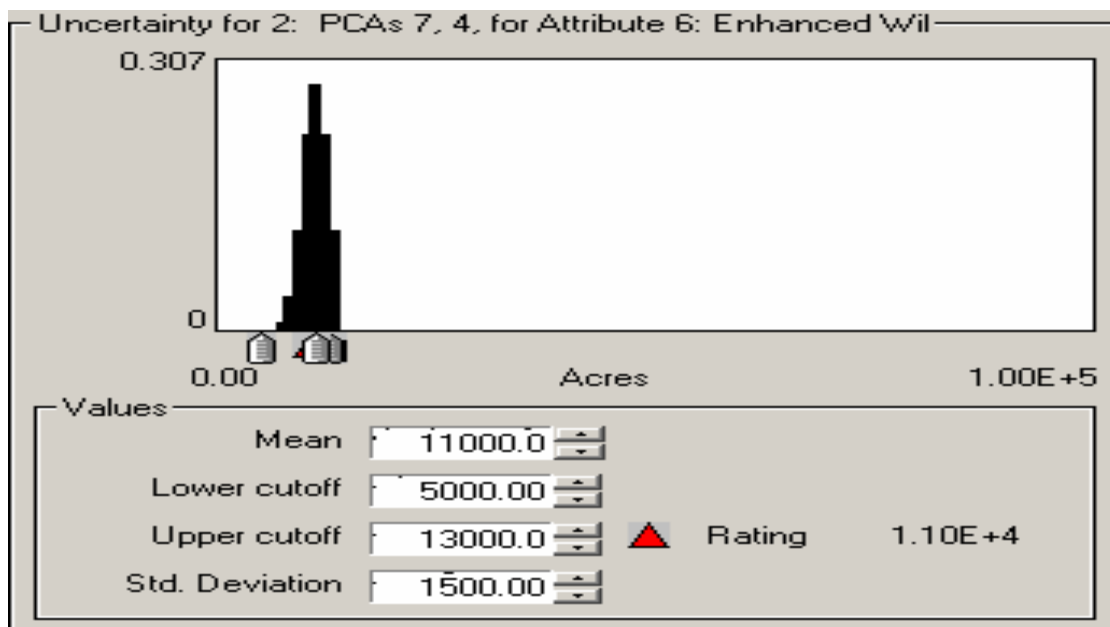
Criterion 3: Present Value Cost per Pound of Phosphorus Removed, \$/lb
Combination 18: PCAs 9 and 6



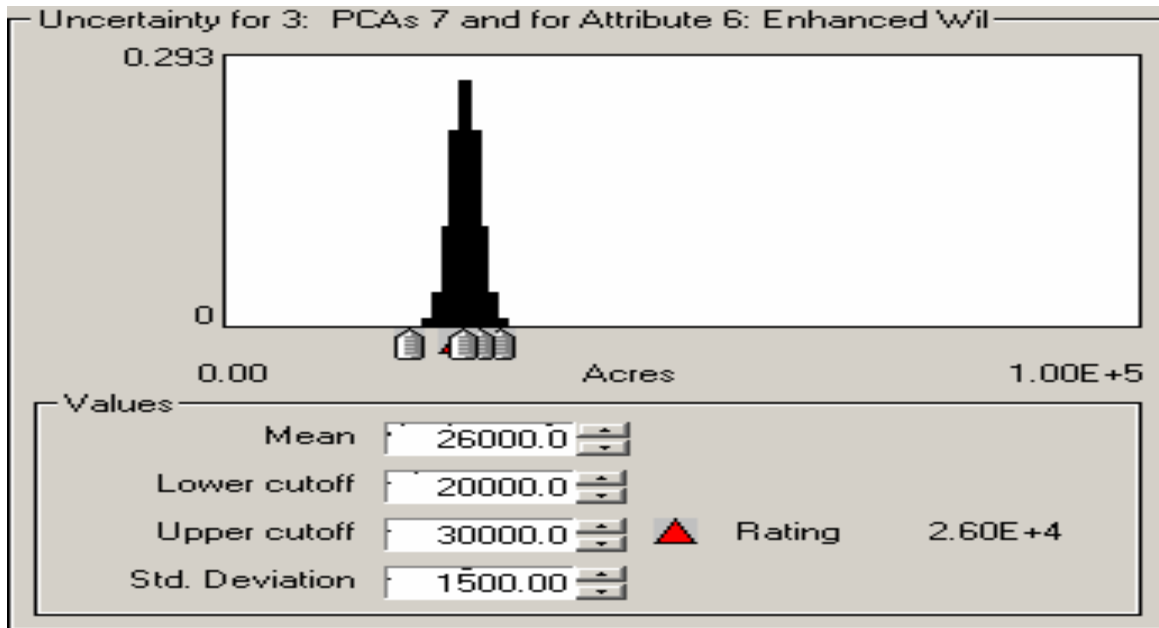
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 1: PCAs 7 and 11**



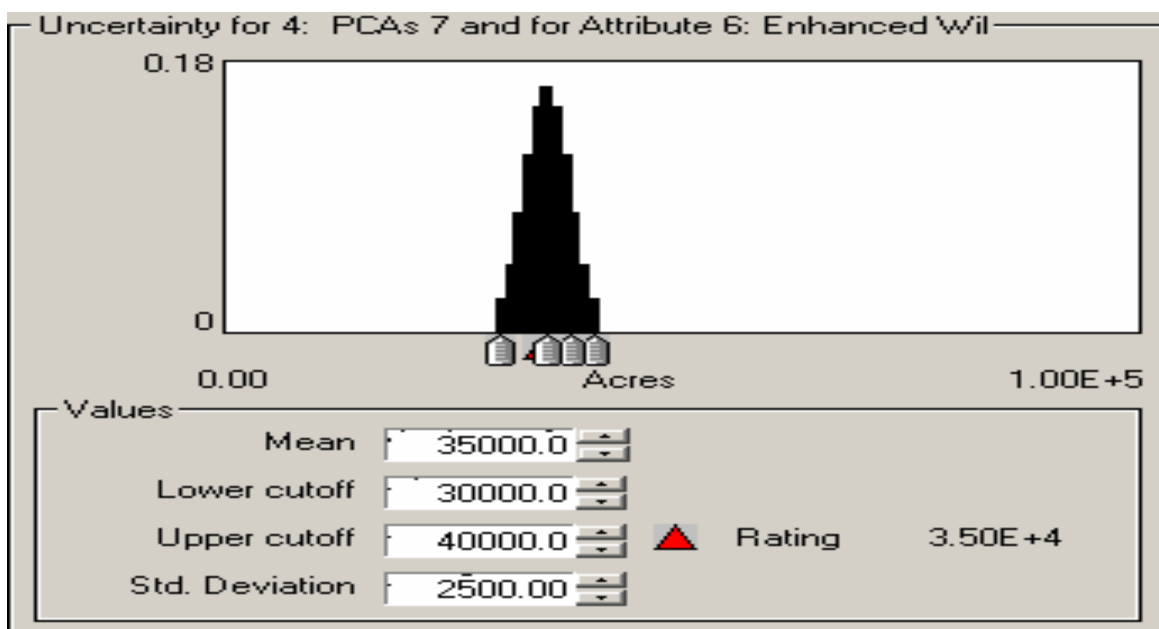
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 2: PCAs 7, 4 and 5**



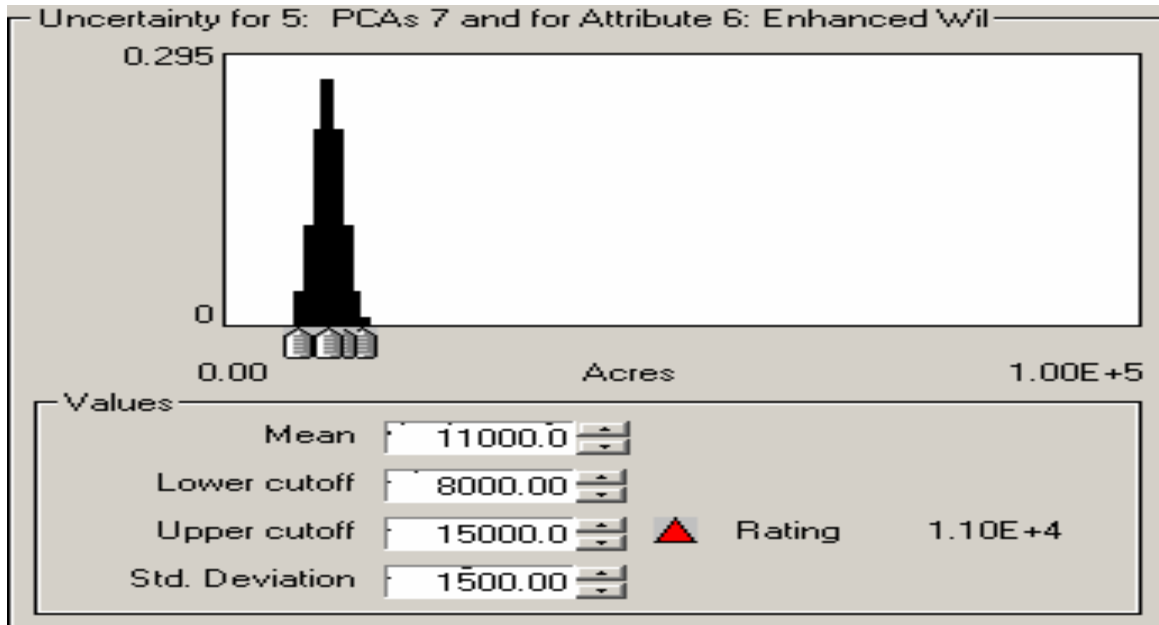
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 3: PCAs 7 and 1**



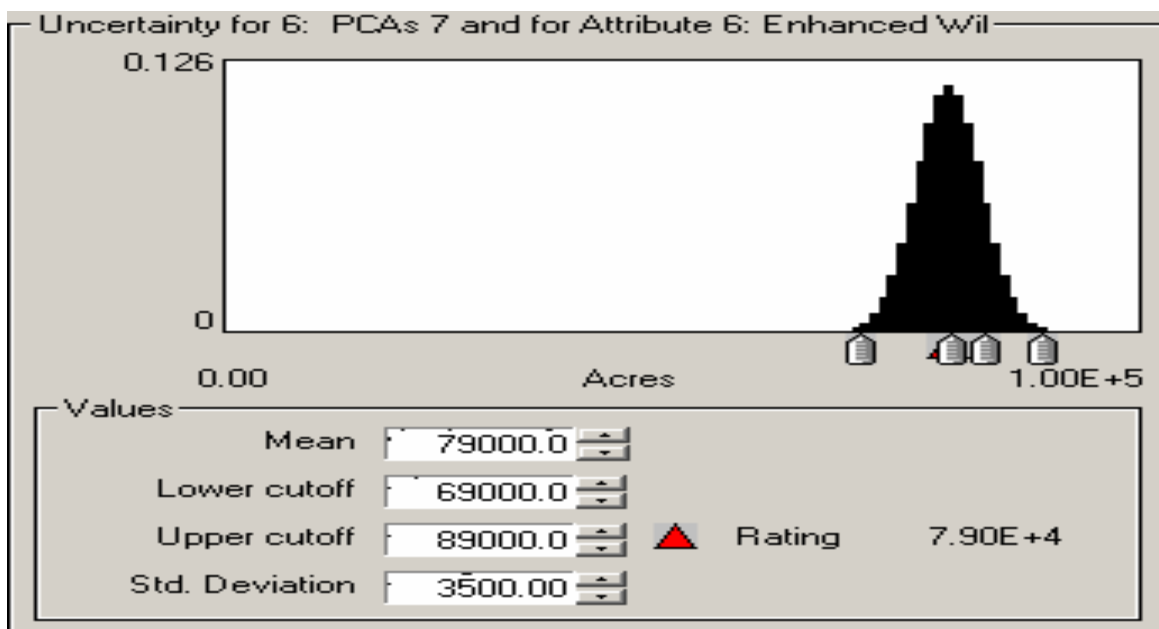
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 4: PCAs 7 and 2**



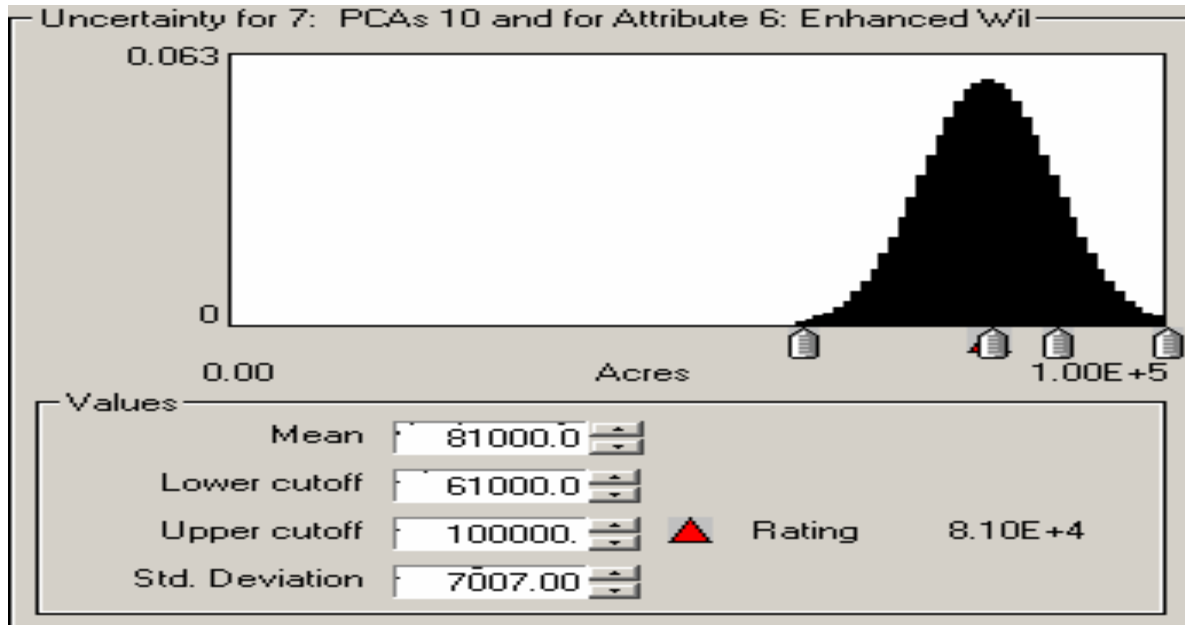
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 5: PCAs 7 and 3



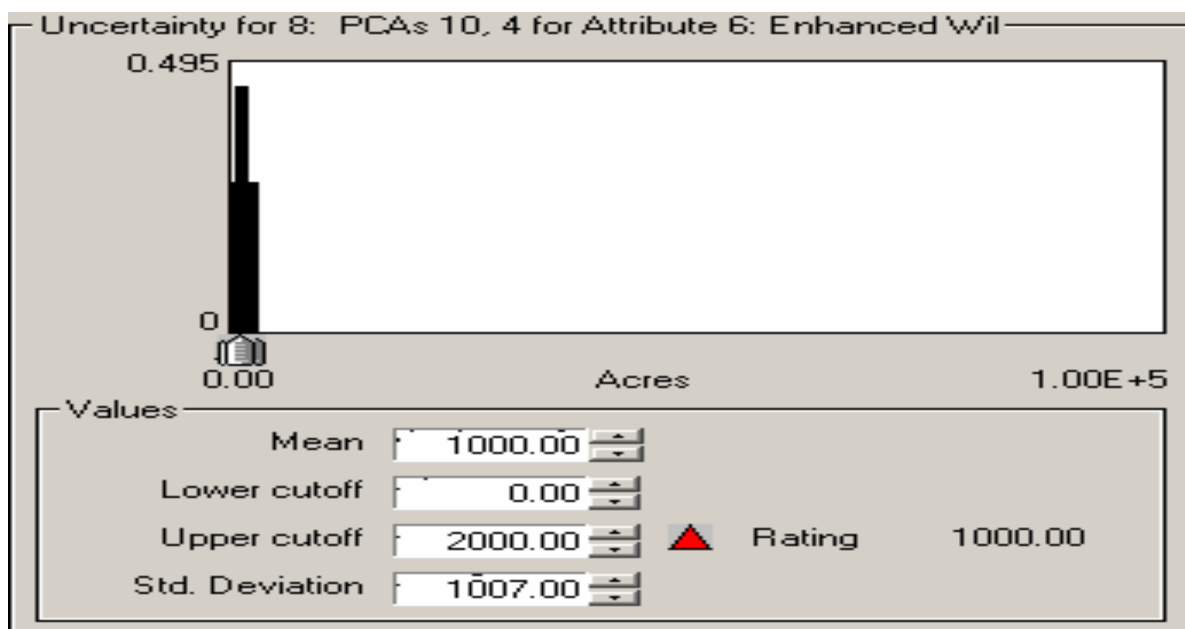
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 6: PCAs 7 and 6



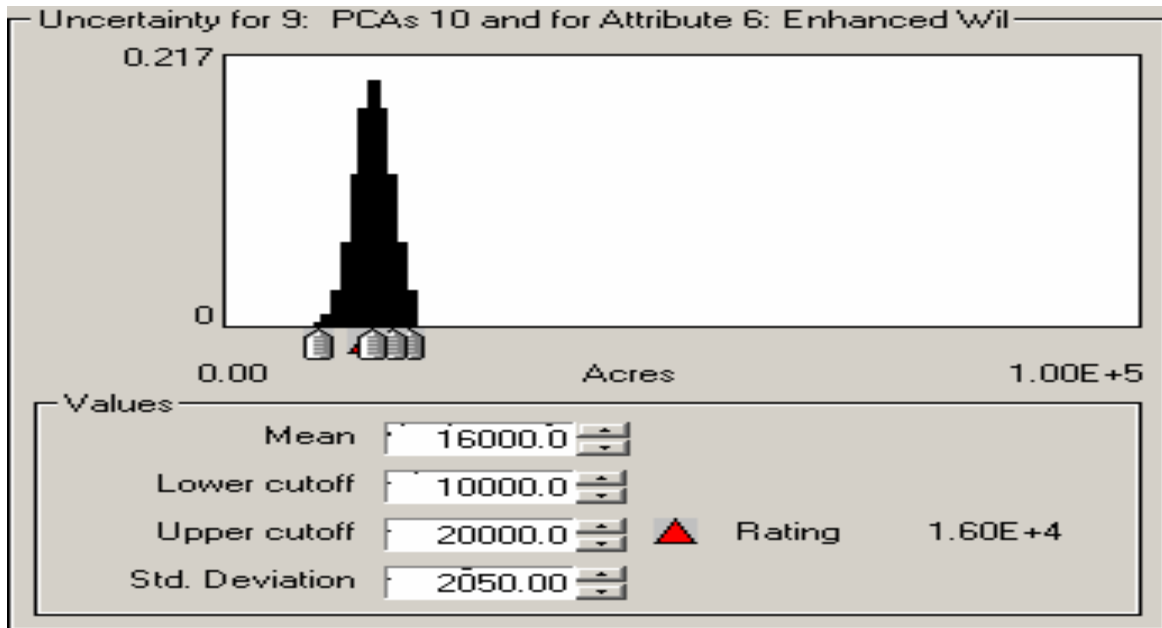
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 7: PCAs 10 and 11



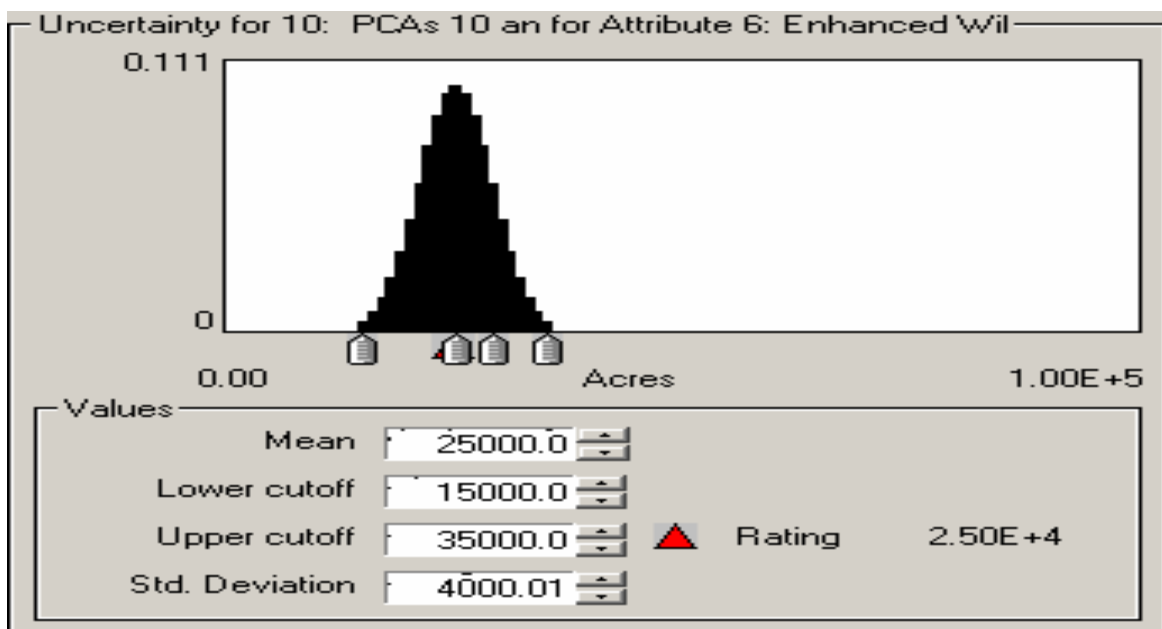
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 8: PCAs 10, 4 and 5



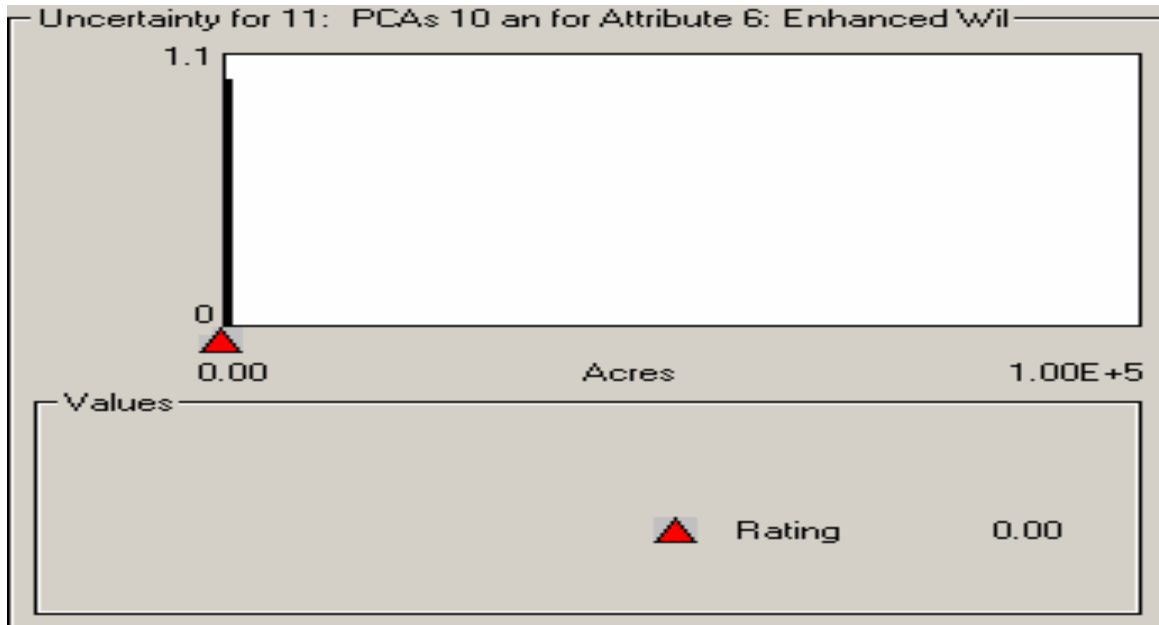
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 9: PCAs 10 and 1**



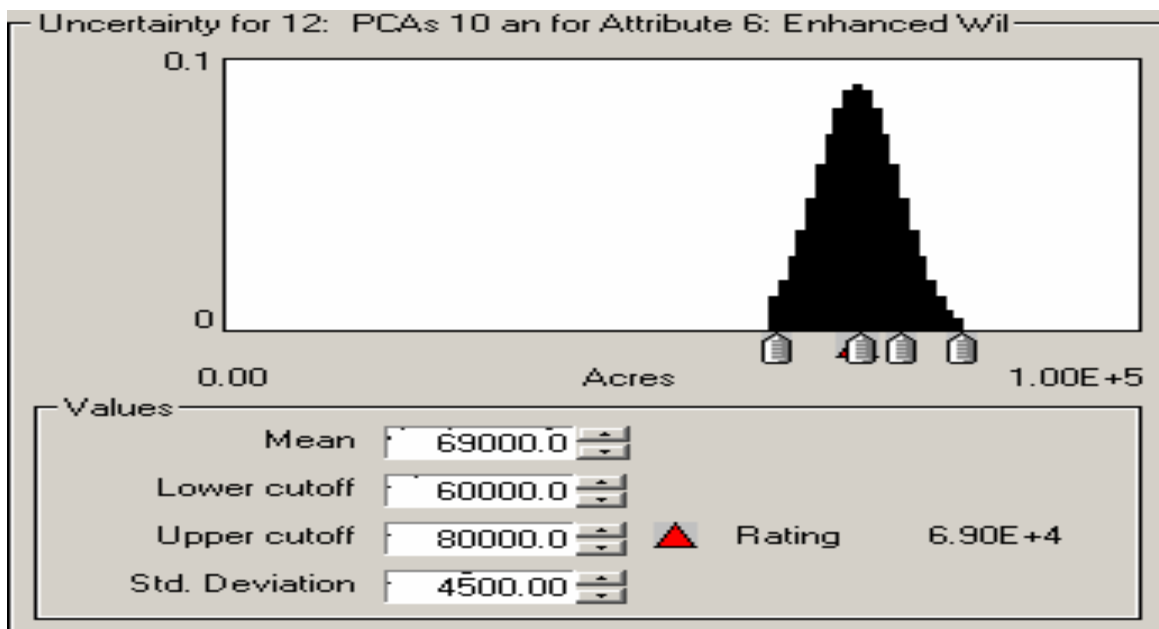
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 10: PCAs 10 and 2**



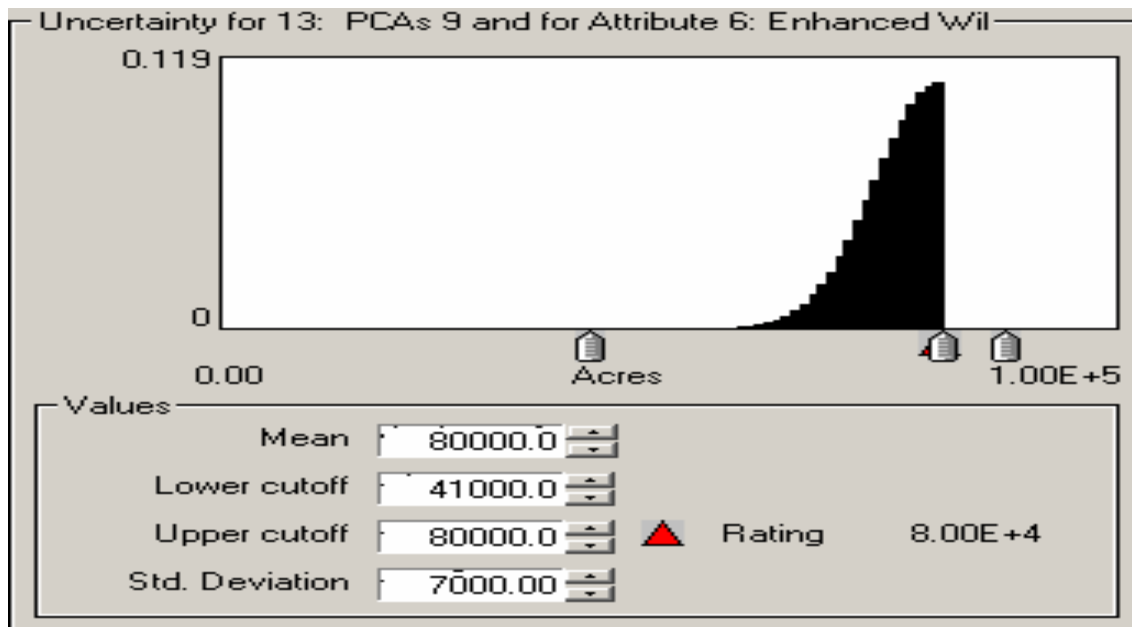
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 11: PCAs 10 and 3



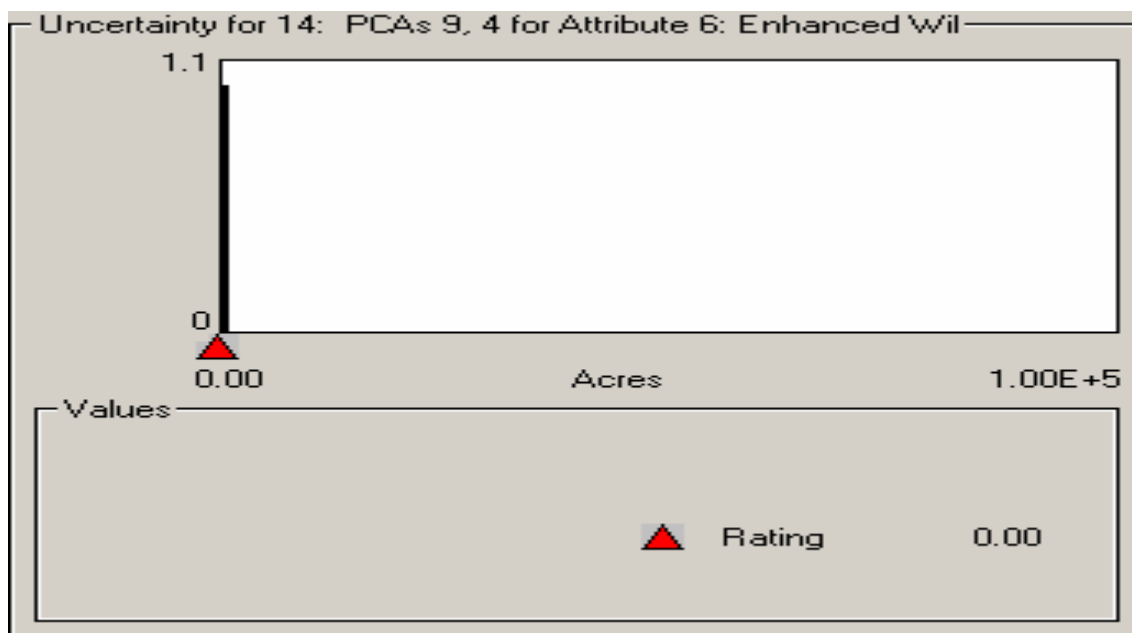
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 12: PCAs 10 and 6



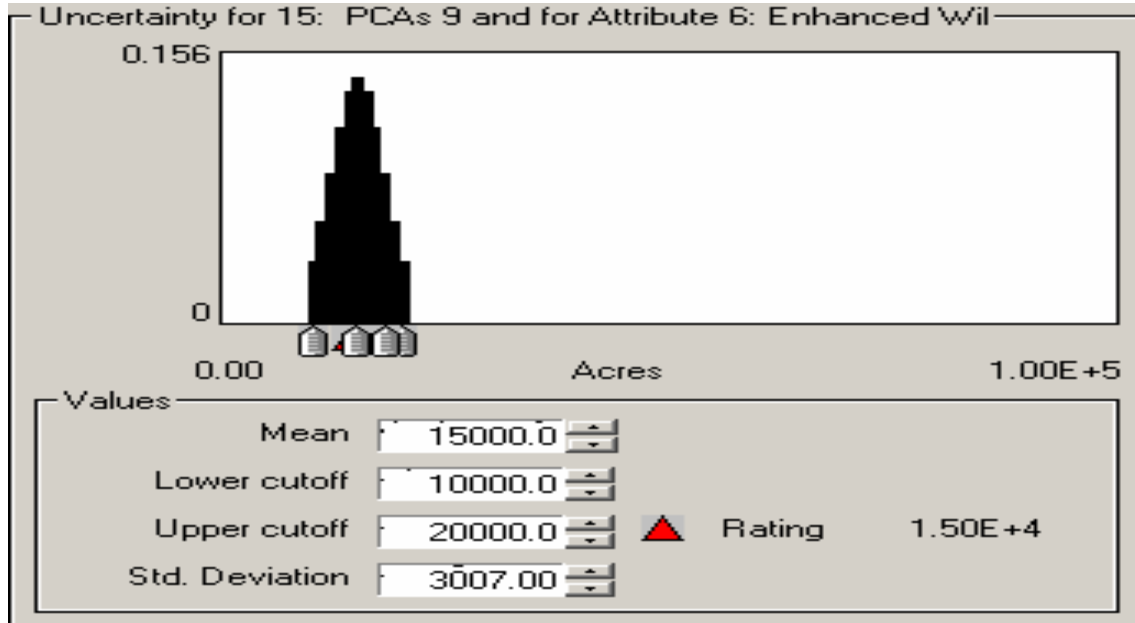
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 13: PCAs 9 and 11**



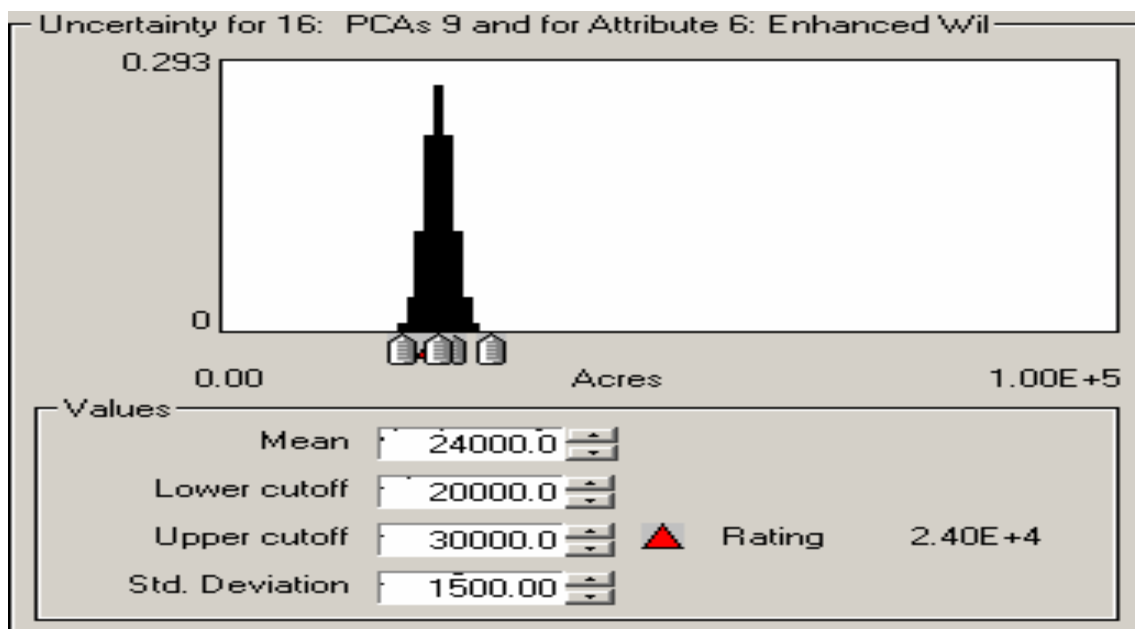
**Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 14: PCAs 9, 4 and 5**



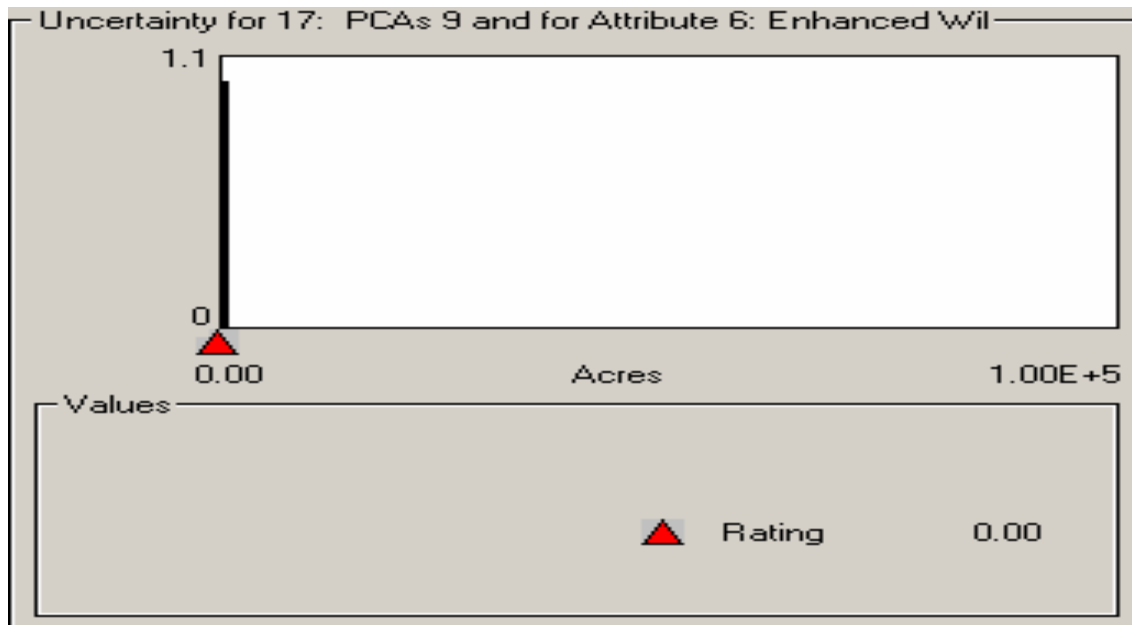
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 15: PCAs 9 and 1



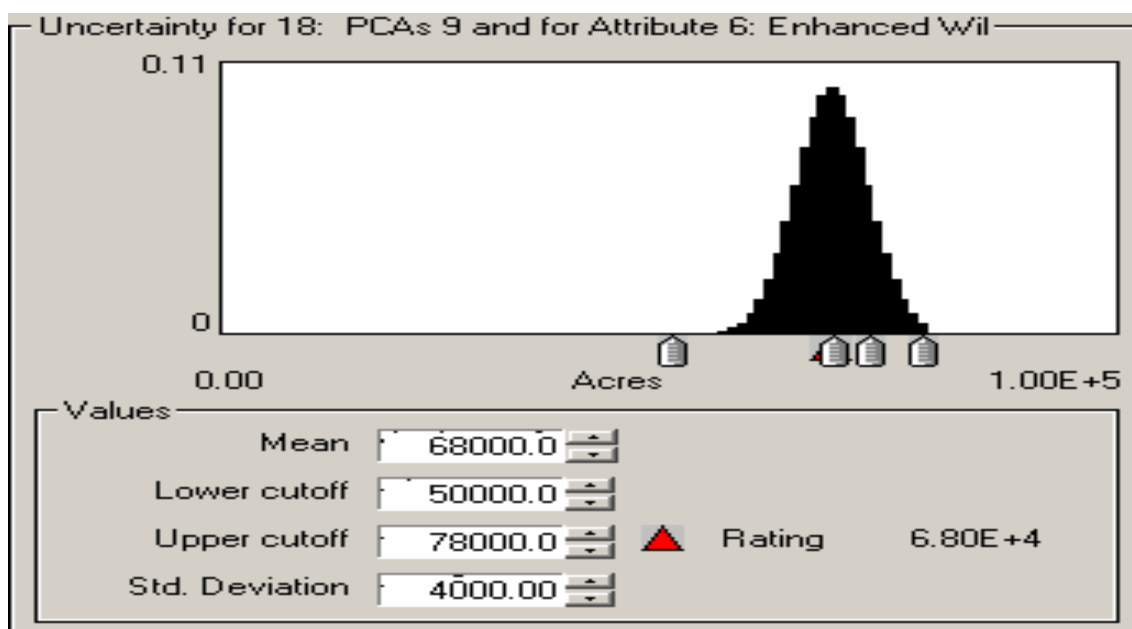
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 16: PCAs 9 and 2



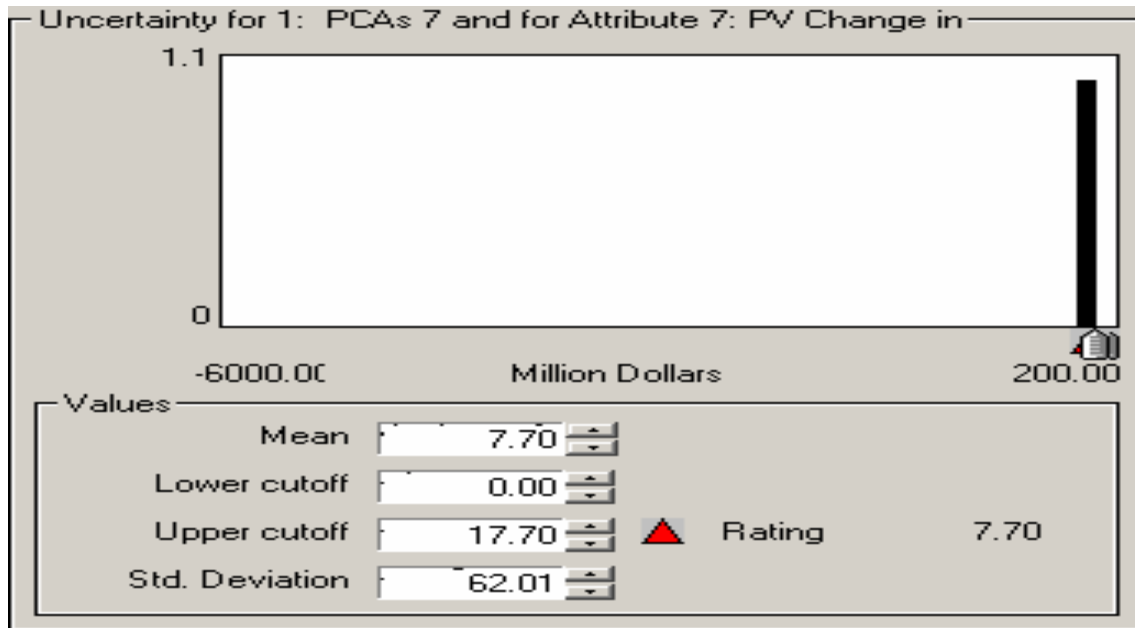
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 17: PCAs 9 and 3



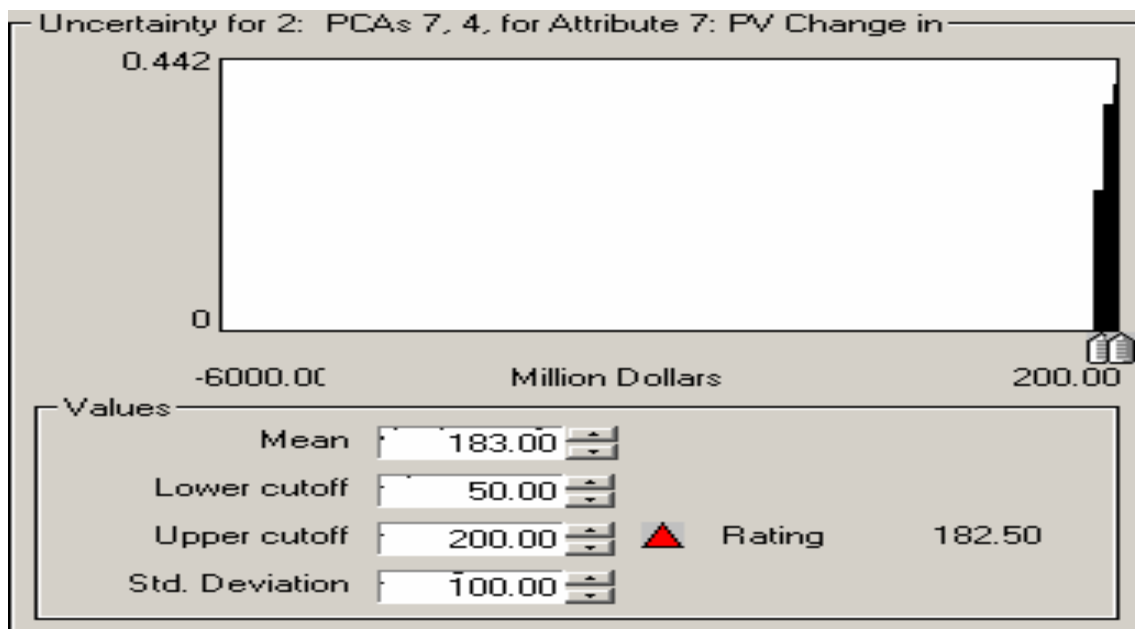
Criterion 6: Acres of Created or Restored Wildlife Habitat
Combination 18: PCAs 9 and 6



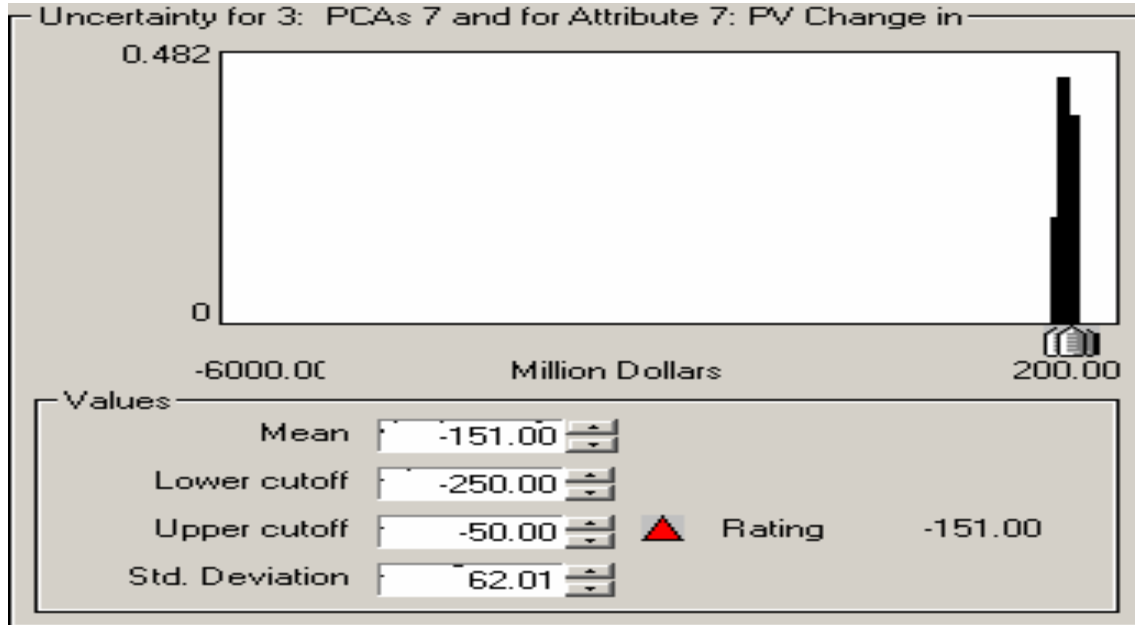
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 1: PCAs 7 and 11



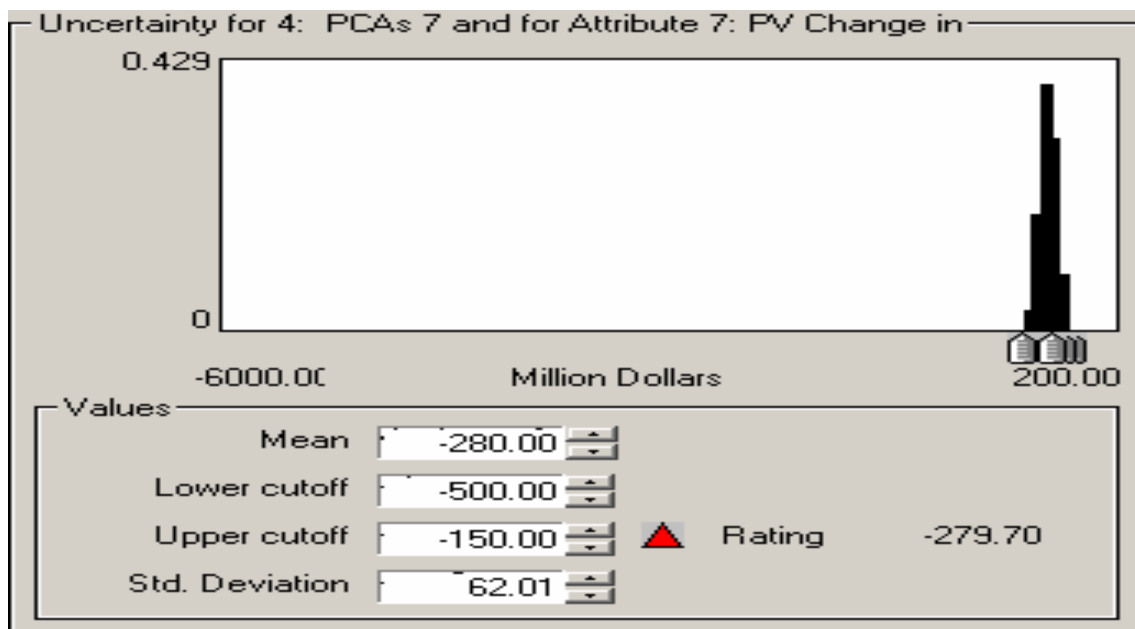
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 2: PCAs 7, 4 and 5



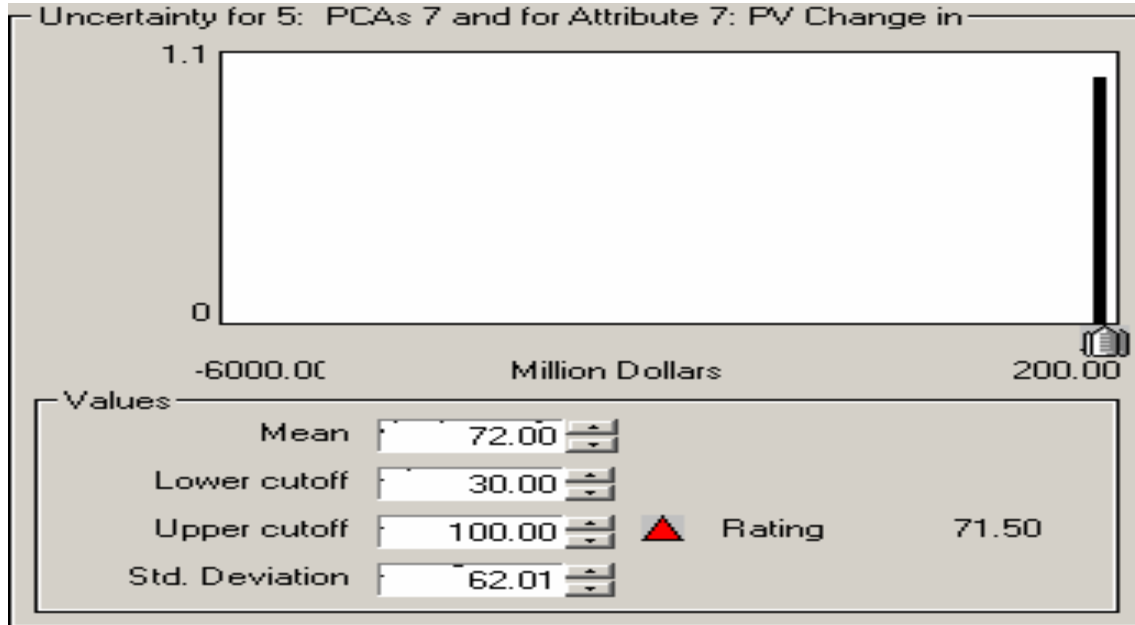
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 3: PCAs 7 and 1



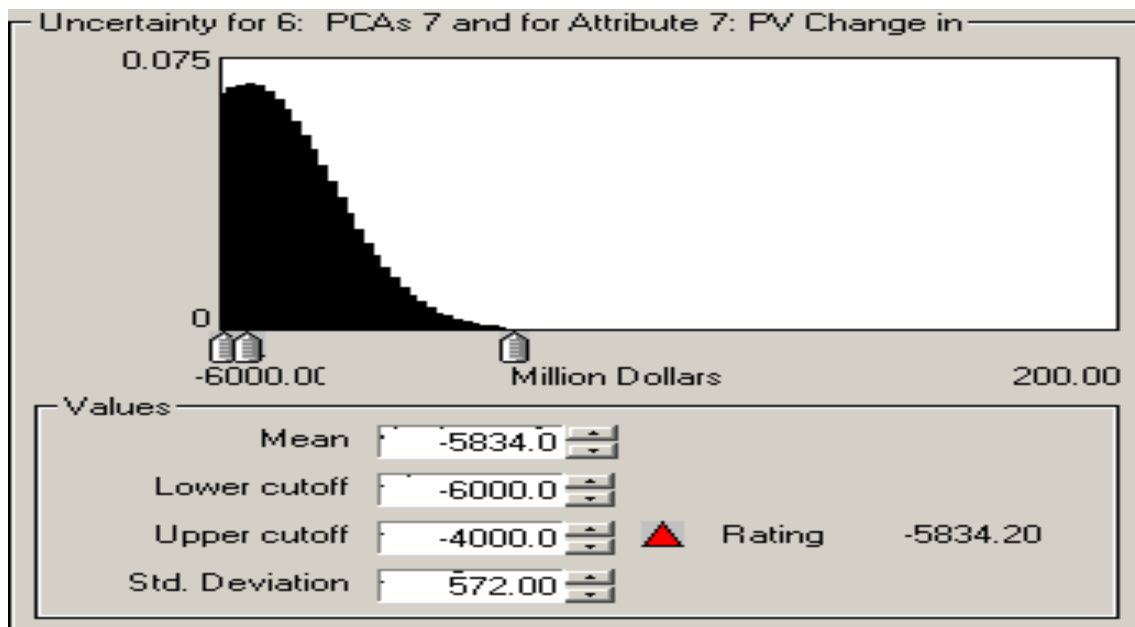
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 4: PCAs 7 and 2



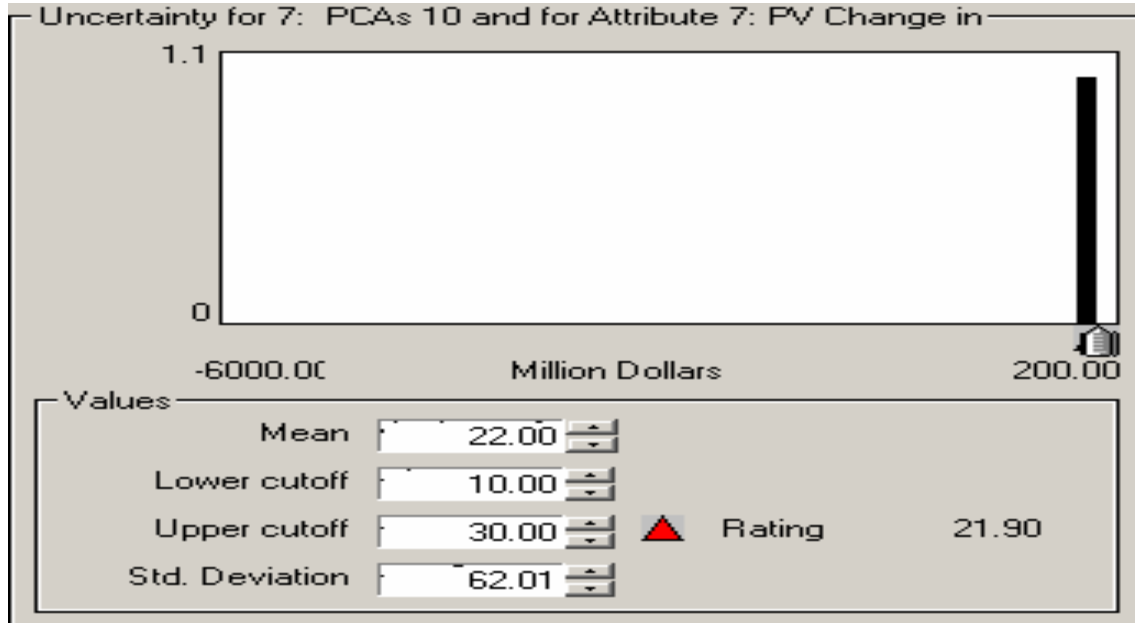
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 5: PCAs 7 and 3



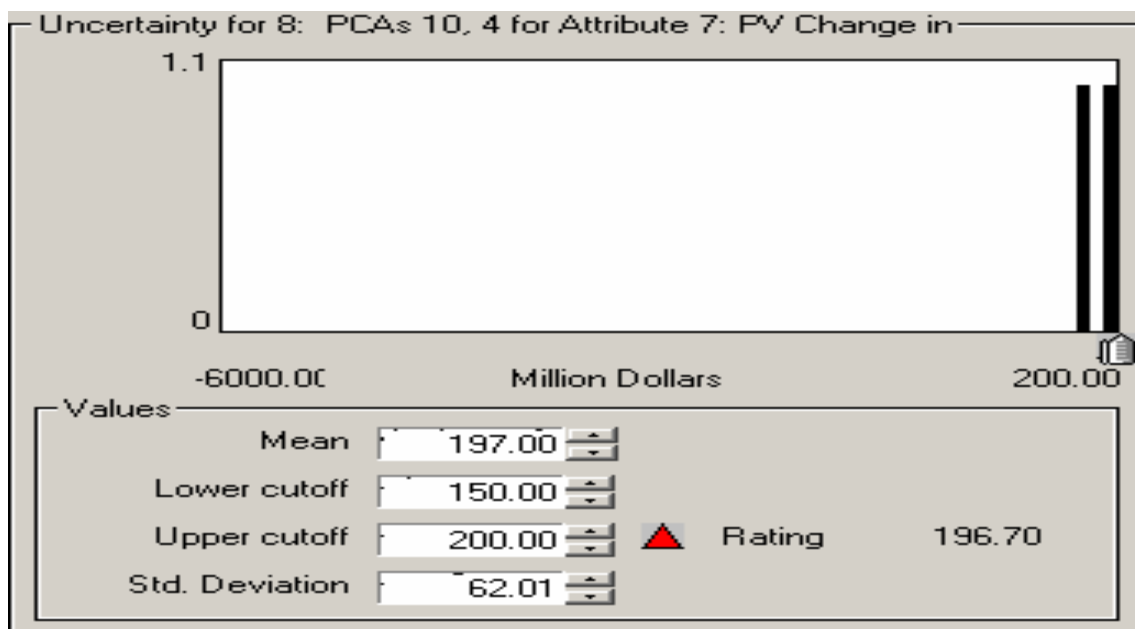
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 6: PCAs 7 and 6



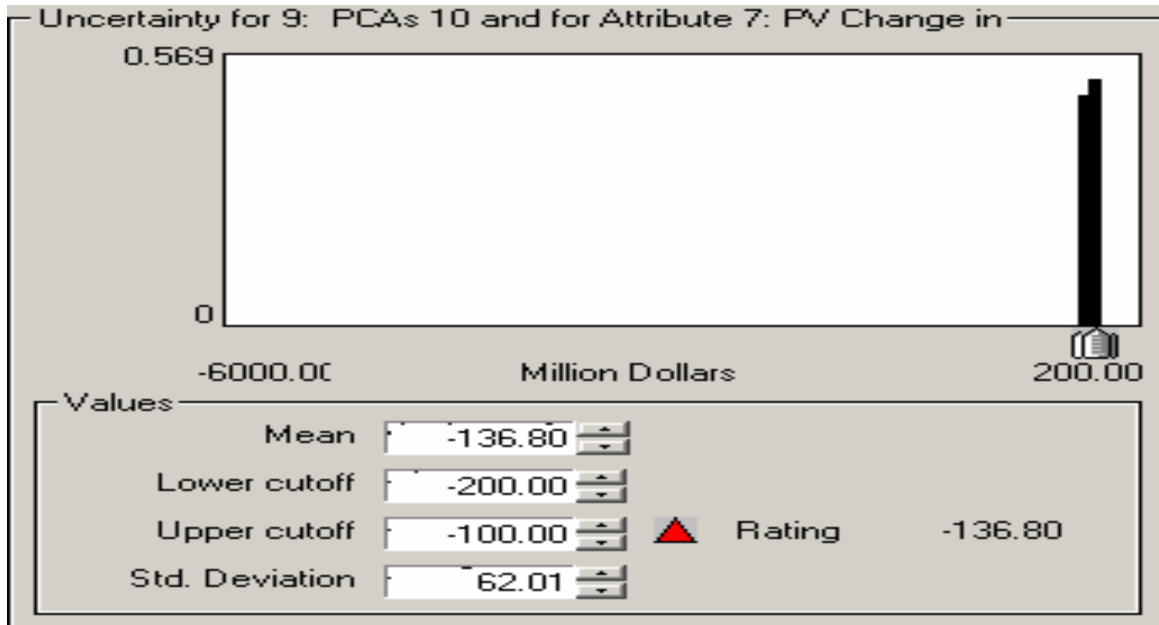
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 7: PCAs 10 and 11



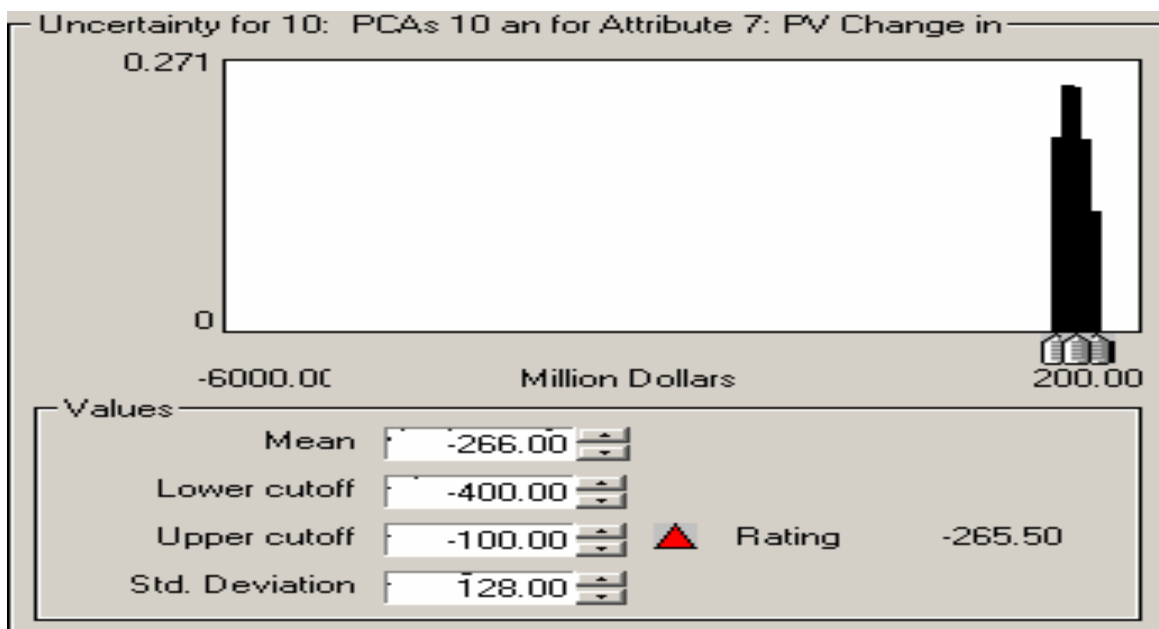
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 8: PCAs 10, 4 and 5



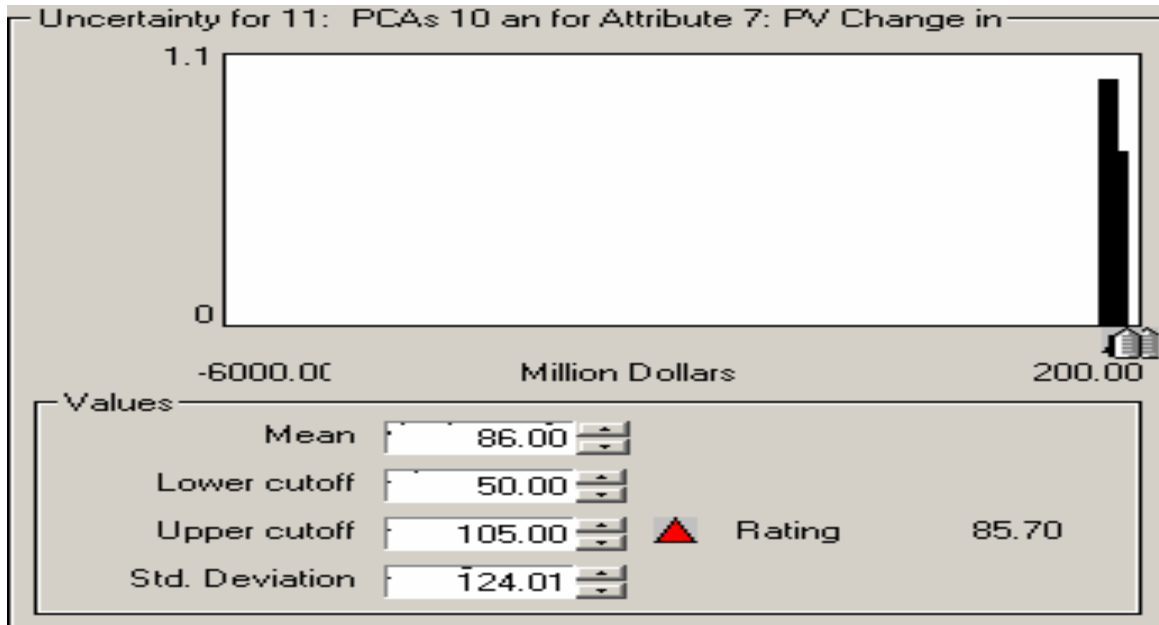
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 9: PCAs 10 and 1



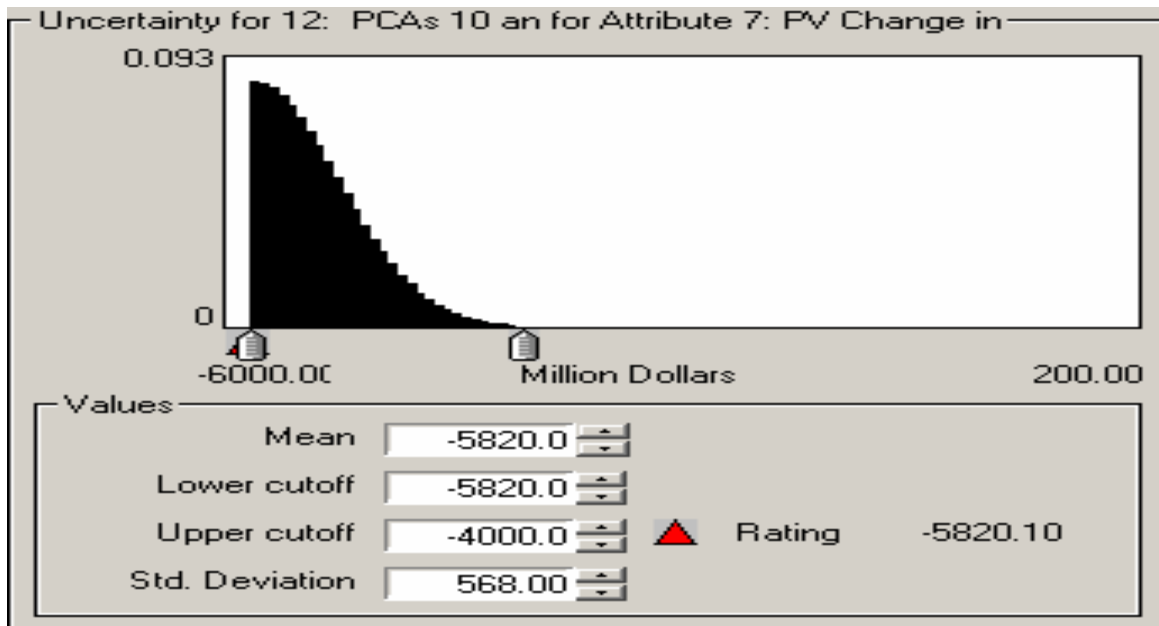
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 10: PCAs 10 and 2



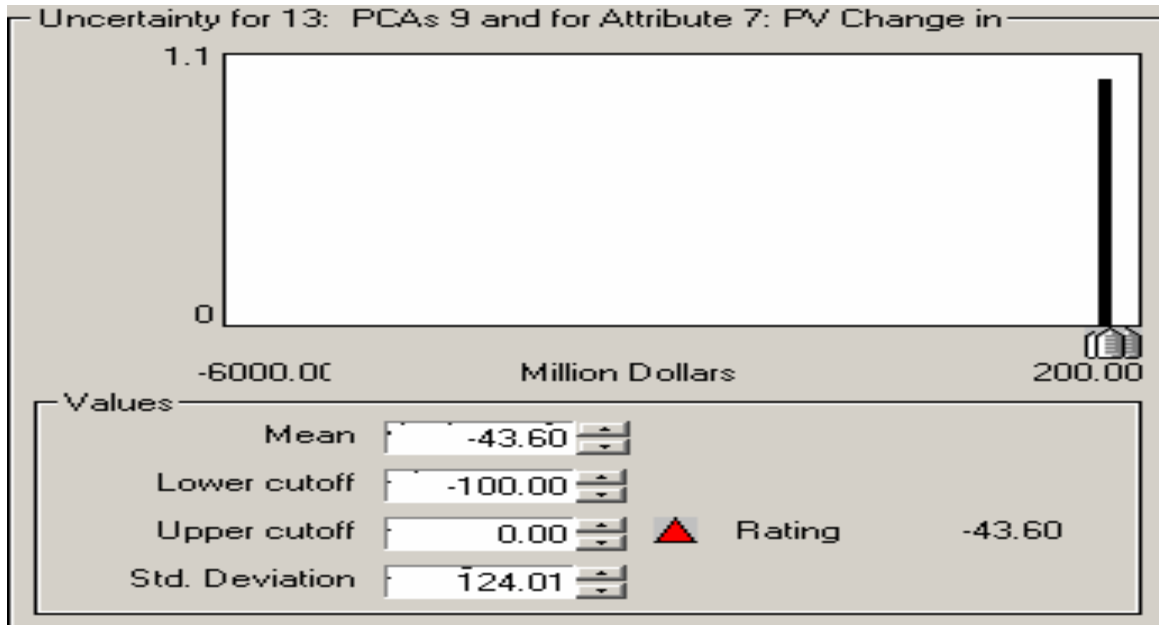
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 11: PCAs 10 and 3



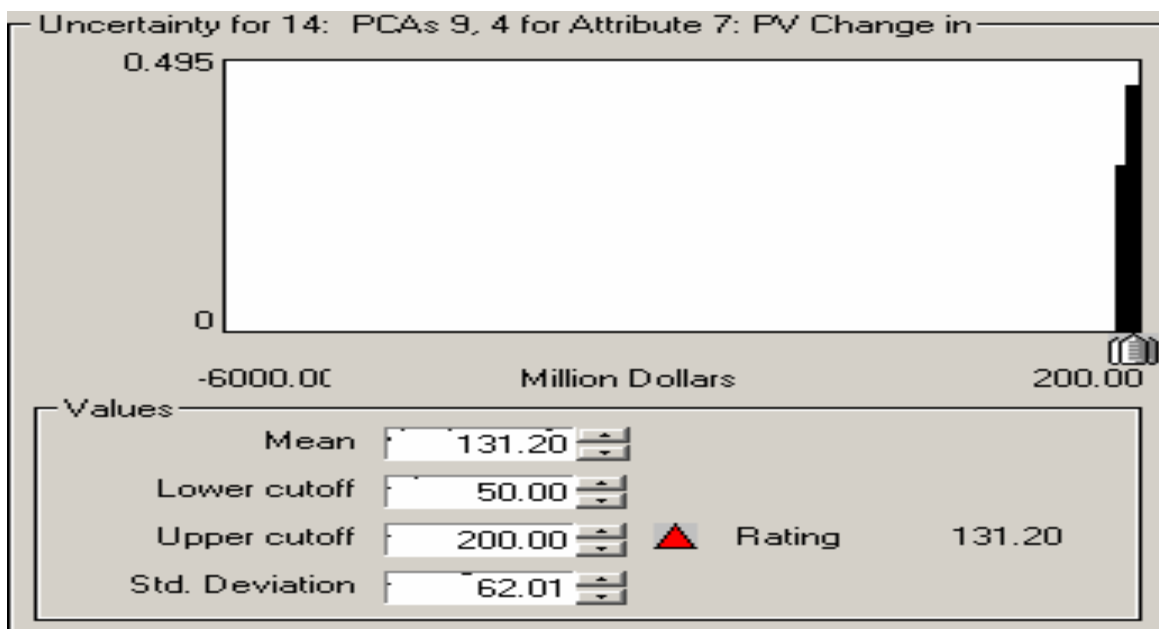
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 12: PCAs 10 and 6



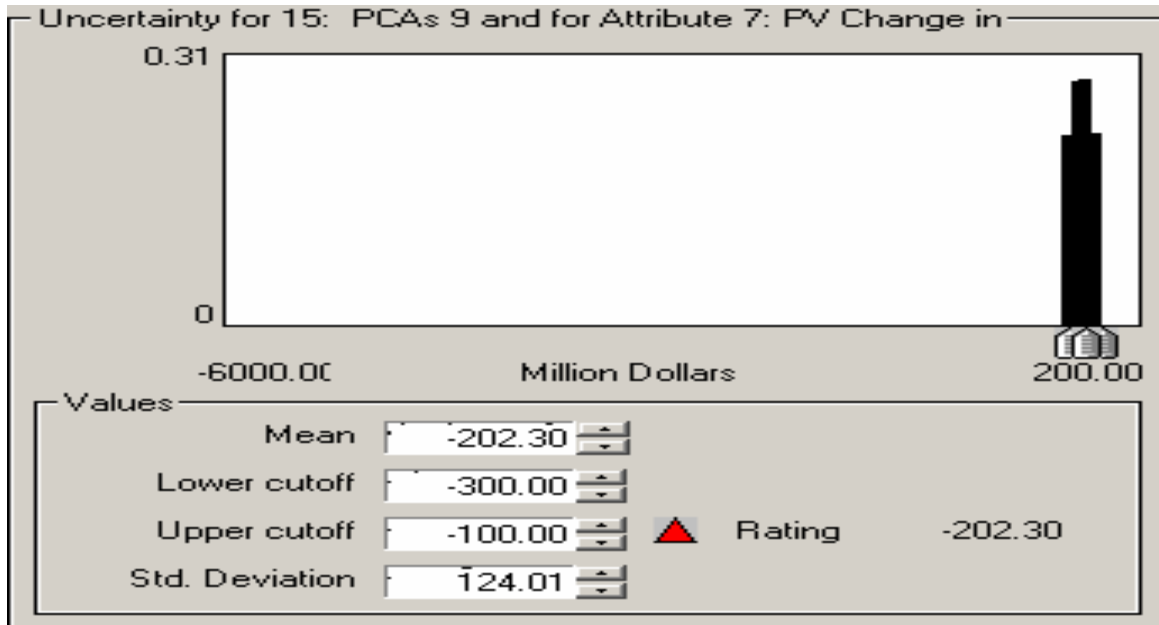
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 13: PCAs 9 and 11



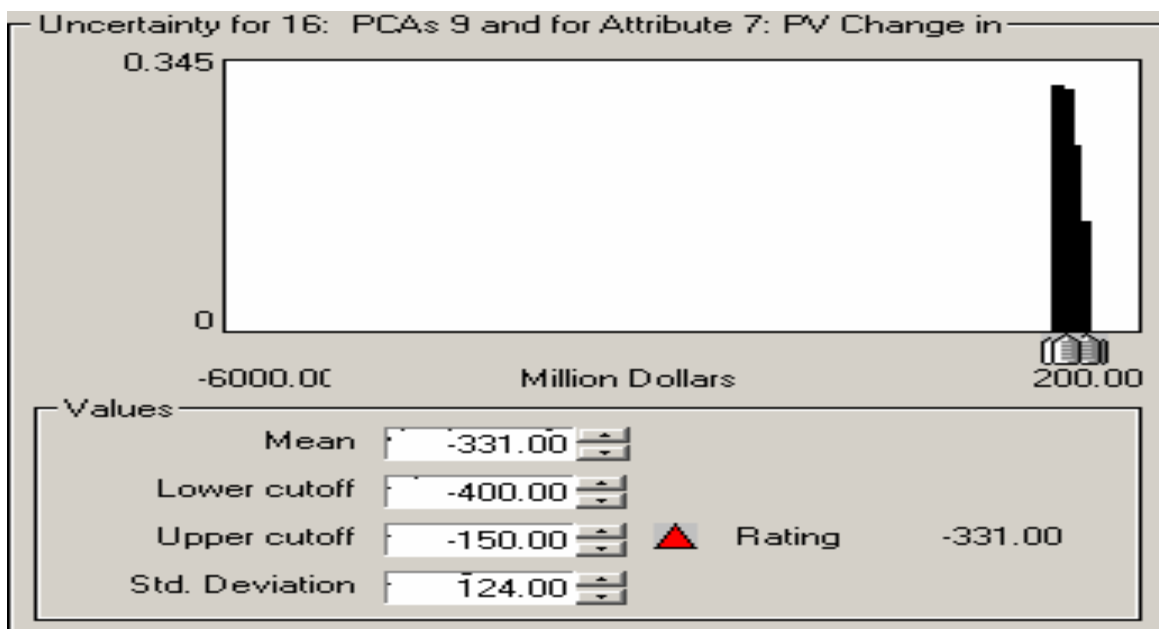
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 14: PCAs 9, 4 and 5



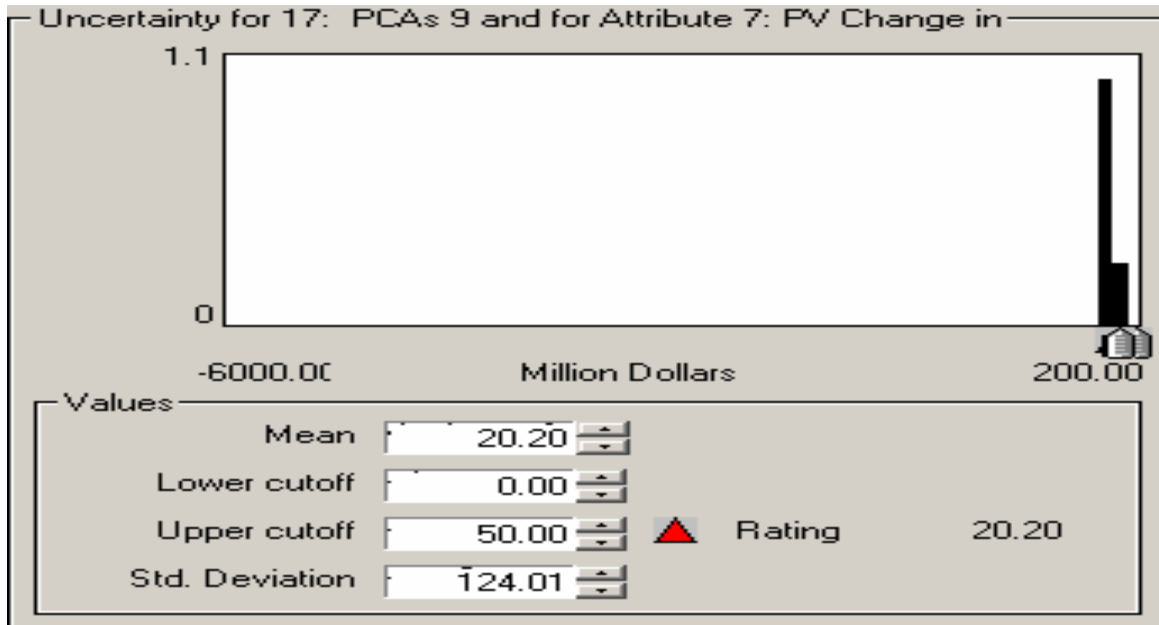
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 15: PCAs 9 and 1



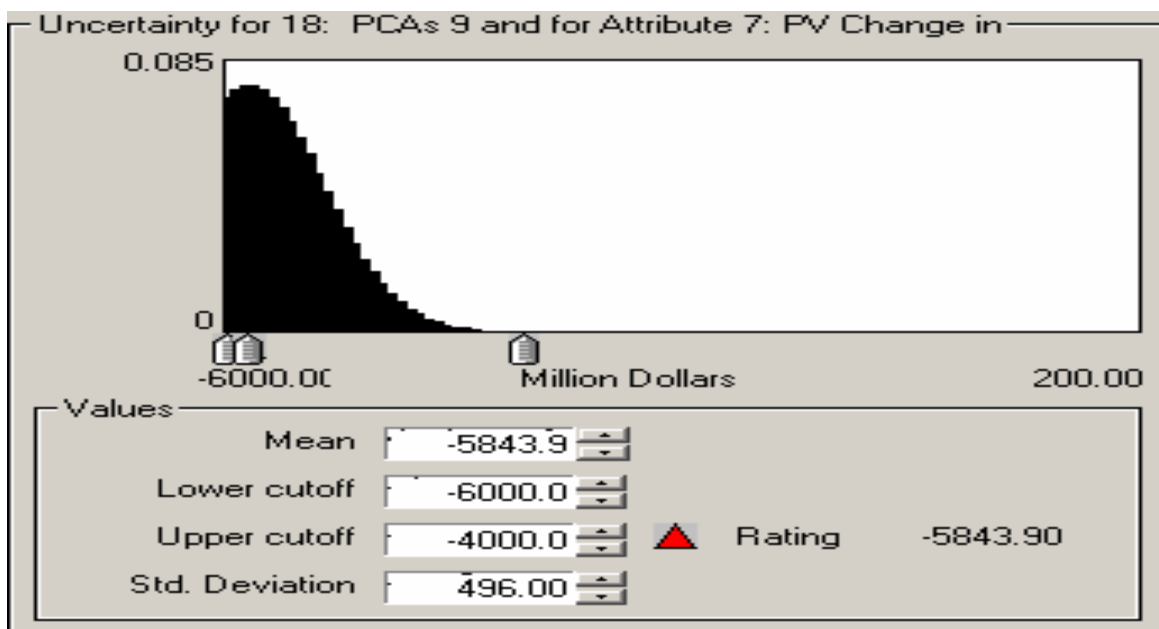
Criterion 7: Present Value Change in Regional Income, million dollars
Combination 16: PCAs 9 and 2



Criterion 7: Present Value Change in Regional Income, million dollars
Combination 17: PCAs 9 and 3



Criterion 7: Present Value Change in Regional Income, million dollars
Combination 18: PCAs 9 and 6



Appendix D Tables

Calculation of Cost-Effectiveness and Regional Income for PCA Combinations

Table D-1
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 1: PCA 7 and 11 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 7 Activity	Costs					Phosphorus Removed in Pounds	
			Reduction in Land Value	Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning & Implementation	\$0	\$1,365,592	\$0	\$0	\$1,365,592	0	0
2003	2	Planning & Implementation	\$0	\$2,338,474	\$0	\$0	\$2,338,474	0	0
2004	3	Planning & Implementation	\$0	\$2,697,562	\$0	\$0	\$2,697,562	0	0
2005	4	Plan, Implement, Design, Construction ^(a)	\$56,000,000	\$1,876,917	\$38,264,211	\$1,144,351	\$97,285,479	0	0
2006	5	Design and Construction	\$56,000,000	\$1,534,433	\$34,204,392	\$2,288,702	\$94,027,527	73,029	44,177
2007	6	Design and Construction	\$56,000,000	\$1,840,785	\$34,620,140	\$3,433,053	\$95,893,978	146,058	88,353
2008	7	Design and Construction	\$0	\$1,821,406	\$32,111,681	\$3,433,053	\$37,366,141	219,086	132,530
2009	8	Design and Construction	\$0	\$1,743,857	\$23,817,056	\$3,433,053	\$28,993,967	219,086	132,530
2010	9	Design and Construction	\$0	\$1,739,685	\$18,812,981	\$3,433,053	\$23,985,719	219,086	132,530
2011	10	Design and Construction	\$0	\$1,742,321	\$11,773,823	\$5,597,167	\$19,113,311	286,410	192,276
2012	11	Design and Construction	\$0	\$1,702,782	\$11,773,823	\$5,597,167	\$19,073,772	286,410	192,276
2013	12	Design and Construction	\$0	\$1,690,021	\$6,019,467	\$5,597,167	\$13,306,655	286,410	192,276
2014	13	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2015	14	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2016	15	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2017	16	Operation	\$0	\$1,102,745	\$2,538,000	\$8,199,167	\$11,839,912	309,702	212,037
2018	17	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2019	18	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2020	19	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2021	20	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2022	21	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2023	22	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2024	23	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2025	24	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2026	25	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2027	26	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037

Table D-1 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 1: PCA 7 and 11 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 7 Activity	Costs					Phosphorus Removed in Pounds	
			Reduction in Land Value	Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2028	27	Operation	\$0	\$1,102,745	\$22,238,000	\$8,199,167	\$31,539,912	309,702	212,037
2029	28	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2030	29	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2031	30	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2032	31	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2033	32	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2034	33	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2035	34	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2036	35	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2037	36	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2038	37	Operation	\$0	\$1,102,745	\$2,538,000	\$8,199,167	\$11,839,912	309,702	212,037
2039	38	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2040	39	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2041	40	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2042	41	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2043	42	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2044	43	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2045	44	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2046	45	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2047	46	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2048	47	Operation	\$0	\$1,102,745	\$22,238,000	\$8,199,167	\$31,539,912	309,702	212,037
2049	48	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2050	49	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2051	50	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2052	51	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2053	52	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2054	53	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037

Table D-1 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 1: PCA 7 and 11 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 7 Activity	Costs					Phosphorus Removed in Pounds	
			Reduction in Land Value	Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2055	54	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2056	55	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2057	56	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2058	57	Operation	\$0	\$1,102,745	\$2,538,000	\$8,199,167	\$11,839,912	309,702	212,037
2059	58	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2060	59	Operation	\$0	\$1,102,745	\$0	\$8,199,167	\$9,301,912	309,702	212,037
2061	60	Operation	\$0	\$1,102,745	-\$7,940,400	\$8,199,167	\$1,361,512	309,702	212,037
	Total Non-Discounted		\$168,000,000	\$75,025,594	\$255,547,173	\$427,516,808	\$926,089,574	16,601,293	11,284,707
	Present Value at 3.2% discount rate						\$529,955,147	6,471,824	4,367,462
	PV Cost per pound of P removed							\$81.89	\$121.34
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							276,688	188,078

^(a) Design and construction of the Taylor Creek / Nubbin Slough STA begins in year 4. Planning and implementation of the other RASTAs continues in year 4.

Table D-2
Present Value of Change in Regional Income Due to:
Combination 1: PCA 7 and 11 - RASTAs with Isolated Wetlands Restoration of Pastureland

Tracking Year	Year	PCA 7 Activity	Due to Change in Cattle Sales and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning & Implementation	\$0	\$1,032,216	\$0	\$0	\$1,032,216	\$1,032,216
2003	2	Planning & Implementation	\$0	\$1,627,553	\$0	\$0	\$1,627,553	\$1,627,553
2004	3	Planning and Implementation	\$0	\$1,847,290	\$0	\$0	\$1,847,290	\$1,847,290
2005	4	Planning, Implementation, Design, Construction (a)	-\$328,969	\$1,314,644	\$5,152,199	\$416,495	\$6,883,337	\$6,554,368
2006	5	Design and Construction	-\$2,350,464	\$1,271,167	\$5,276,303	\$832,990	\$7,380,459	\$5,029,995
2007	6	Design and Construction	-\$4,255,968	\$1,624,733	\$6,450,831	\$1,249,484	\$9,325,048	\$5,069,080
2008	7	Design and Construction	-\$6,192,771	\$1,612,875	\$4,356,866	\$1,249,484	\$7,219,225	\$1,026,454
2009	8	Design and Construction	-\$6,192,771	\$1,565,420	\$4,311,375	\$1,249,484	\$7,126,279	\$933,508
2010	9	Design and Construction	-\$6,192,771	\$1,562,867	\$3,405,535	\$1,249,484	\$6,217,886	\$25,114
2011	10	Design and Construction	-\$6,192,771	\$1,564,480	\$2,131,303	\$2,527,922	\$6,223,705	\$30,934
2012	11	Design and Construction	-\$6,192,771	\$1,540,285	\$2,131,303	\$2,527,922	\$6,199,510	\$6,738
2013	12	Design and Construction	-\$6,192,771	\$1,532,476	\$1,089,647	\$2,527,922	\$5,150,045	-\$1,042,726
2014	13	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2015	14	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2016	15	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2017	16	Operation	-\$6,192,771	\$1,173,104	\$626,140	\$4,065,038	\$5,864,282	-\$328,489
2018	17	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2019	18	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2020	19	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2021	20	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2022	21	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2023	22	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2024	23	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2025	24	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2026	25	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2027	26	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2028	27	Operation	-\$6,192,771	\$1,173,104	\$5,486,254	\$4,065,038	\$10,724,396	\$4,531,624
2029	28	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2030	29	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629

Table D-2 (Continued)
Present Value of Change in Regional Income Due to:
Combination 1: PCA 7 and 11 - RASTAs with Isolated Wetlands Restoration of Pastureland

Tracking Year	Year	PCA 7 Activity	Due to Change in Cattle Sales and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2031	30	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2032	31	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2033	32	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2034	33	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2035	34	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2036	35	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2037	36	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2038	37	Operation	-\$6,192,771	\$1,173,104	\$626,140	\$4,065,038	\$5,864,282	-\$328,489
2039	38	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2040	39	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2041	40	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2042	41	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2043	42	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2044	43	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2045	44	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2046	45	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2047	46	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2048	47	Operation	-\$6,192,771	\$1,173,104	\$5,486,254	\$4,065,038	\$10,724,396	\$4,531,624
2049	48	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2050	49	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2051	50	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2052	51	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2053	52	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2054	53	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2055	54	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2056	55	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2057	56	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2058	57	Operation	-\$6,192,771	\$1,173,104	\$626,140	\$4,065,038	\$5,864,282	-\$328,489
2059	58	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2060	59	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
2061	60	Operation	-\$6,192,771	\$1,173,104	\$0	\$4,065,038	\$5,238,142	-\$954,629
Total Non-Discounted			-\$341,345,045	\$74,404,977	\$47,156,288	\$208,953,032	\$330,514,296	-\$10,830,748
Present Value at 3.2% discount rate								\$7,695,949

Table D-3
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 2: PCAs 7, 4 and 5 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 7 Activity	Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Total Cost	Phosphorus Removed in Pounds	
							At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning & Implementation	\$1,862,688	\$0	\$0	\$1,862,688	0	0
2003	2	Planning & Implementation	\$2,338,474	\$0	\$0	\$2,338,474	0	0
2004	3	Planning & Implementation	\$2,697,562	\$0	\$0	\$2,697,562	0	0
2005	4	Planning, Implementation, Design, Construction (a)	\$1,876,917	\$38,264,211	\$1,144,351	\$41,285,479	138,673	81,680
2006	5	Design and Construction	\$1,534,433	\$34,204,392	\$2,288,702	\$38,027,527	276,245	162,710
2007	6	Design and Construction	\$1,840,785	\$34,620,140	\$3,433,053	\$39,893,978	412,714	243,092
2008	7	Design and Construction	\$1,821,406	\$32,111,681	\$3,433,053	\$37,366,141	422,324	248,752
2009	8	Design and Construction	\$1,743,857	\$23,817,056	\$3,433,053	\$28,993,967	422,005	248,564
2010	9	Design and Construction	\$1,739,685	\$18,812,981	\$3,433,053	\$23,985,719	421,686	248,376
2011	10	Design and Construction	\$1,742,321	\$11,773,823	\$5,597,167	\$19,113,311	490,038	309,123
2012	11	Design and Construction	\$1,702,782	\$11,773,823	\$5,597,167	\$19,073,772	489,719	308,935
2013	12	Design and Construction	\$1,690,021	\$6,019,467	\$5,597,167	\$13,306,655	489,400	308,747
2014	13	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	513,662	329,077
2015	14	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	513,343	328,889
2016	15	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	513,024	328,701
2017	16	Operation	\$1,102,745	\$2,538,000	\$8,199,167	\$11,839,912	512,705	328,513
2018	17	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	512,386	328,325
2019	18	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	512,067	328,137
2020	19	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	511,748	327,949
2021	20	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	511,429	327,761
2022	21	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	512,763	328,547
2023	22	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	514,097	329,333
2024	23	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	515,431	330,118

Table D-3 (Continued)
Cost-Effectiveness Analysis – Present Value Cost per Pound of Phosphorus Removed
Combination 2: PCAs 7, 4 and 5 – Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 7 Activity	Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Total Cost	Phosphorus Removed in Pounds	
							At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2025	24	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	516,765	330,904
2026	25	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	518,098	331,689
2027	26	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2028	27	Operation	\$1,102,745	\$22,238,000	\$8,199,167	\$31,539,912	519,432	332,475
2029	28	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2030	29	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2031	30	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2032	31	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2033	32	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2034	33	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2035	34	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2036	35	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2037	36	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2038	37	Operation	\$1,102,745	\$2,538,000	\$8,199,167	\$11,839,912	519,432	332,475
2039	38	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2040	39	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2041	40	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2042	41	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2043	42	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2044	43	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2045	44	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2046	45	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2047	46	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475

Table D-3 (Continued)
Cost-Effectiveness Analysis – Present Value Cost per Pound of Phosphorus Removed
Combination 2: PCAs 7, 4 and 5 – Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 7 Activity	Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Total Cost	Phosphorus Removed in Pounds	
							At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2048	47	Operation	\$1,102,745	\$22,238,000	\$8,199,167	\$31,539,912	519,432	332,475
2049	48	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2050	49	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2051	50	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2052	51	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2053	52	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2054	53	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2055	54	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2056	55	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2057	56	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2058	57	Operation	\$1,102,745	\$2,538,000	\$8,199,167	\$11,839,912	519,432	332,475
2059	58	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2060	59	Operation	\$1,102,745	\$0	\$8,199,167	\$9,301,912	519,432	332,475
2061	60	Operation	\$1,102,745	-\$7,940,400	\$8,199,167	\$1,361,512	519,432	332,475
		Total Non-Discounted	\$75,522,690	\$255,547,173	\$427,516,808	\$758,586,671	28,420,449	18,074,545
		Present Value at 3.2% discount rate				\$386,869,899	11,351,624	7,172,445
		PV Cost per pound of P removed					\$34.08	\$53.94
		Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)					473,674	301,242

^(a) Design and construction of the Taylor Creek / Nubbin Slough STA begins in year 4. Planning and implementation of the other RASTAs continues in year 4.

Table D-4
Present Value of Change in Regional Income Due to Combination 2: PCAs 7, 4 and 5 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 7 Activity	Due to Change in Cattle Sales, Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning & Implementation	\$0	\$1,141,466	\$0	\$0	\$1,141,466	\$1,141,466
2003	2	Planning & Implementation	\$0	\$1,736,803	\$0	\$0	\$1,736,803	\$1,736,803
2004	3	Planning & Implementation	\$0	\$1,956,540	\$0	\$0	\$1,956,540	\$1,956,540
2005	4	Planning, Implementation, Design, Construction (a)	-\$1,301,947	\$1,206,793	\$10,036,987	\$1,192,404	\$12,436,184	\$11,134,237
2006	5	Design and Construction	-\$2,506,402	\$776,241	\$10,136,155	\$2,379,185	\$13,291,581	\$10,785,179
2007	6	Design and Construction	-\$3,588,012	\$742,732	\$11,285,746	\$3,560,344	\$15,588,822	\$12,000,810
2008	7	Design and Construction	-\$1,729,577	\$510,287	\$4,356,866	\$3,945,891	\$8,813,044	\$7,083,466
2009	8	Design and Construction	-\$1,719,300	\$462,833	\$4,311,375	\$3,937,457	\$8,711,664	\$6,992,364
2010	9	Design and Construction	-\$1,709,022	\$460,279	\$3,405,535	\$3,929,023	\$7,794,837	\$6,085,815
2011	10	Design and Construction	-\$1,698,744	\$461,892	\$2,131,303	\$5,199,027	\$7,792,222	\$6,093,478
2012	11	Design and Construction	-\$1,688,467	\$437,697	\$2,131,303	\$5,190,593	\$7,759,593	\$6,071,127
2013	12	Design and Construction	-\$1,678,189	\$429,889	\$1,089,647	\$5,182,159	\$6,701,694	\$5,023,506
2014	13	Operation	-\$1,667,911	\$70,516	\$0	\$6,710,842	\$6,781,358	\$5,113,447
2015	14	Operation	-\$1,657,633	\$70,516	\$0	\$6,702,408	\$6,772,924	\$5,115,290
2016	15	Operation	-\$1,647,356	\$70,516	\$0	\$6,693,974	\$6,764,490	\$5,117,134
2017	16	Operation	-\$1,637,078	\$70,516	\$0	\$6,685,540	\$6,756,056	\$5,118,978
2018	17	Operation	-\$1,626,800	\$78,893	\$8,542,911	\$6,677,106	\$15,298,910	\$13,672,110
2019	18	Operation	-\$1,616,523	\$279,934	\$6,733,104	\$6,668,672	\$13,681,710	\$12,065,188
2020	19	Operation	-\$1,606,245	\$279,934	\$6,708,168	\$6,660,238	\$13,648,340	\$12,042,095
2021	20	Operation	-\$1,595,967	\$279,934	\$6,683,231	\$6,651,805	\$13,614,969	\$12,019,002
2022	21	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2023	22	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2024	23	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354

Table D-4 (Continued)
Present Value of Change in Regional Income Due to Combination 2: PCAs 7, 4 and 5 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 7 Activity	Due to Change in Cattle Sales, Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2026	25	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2027	26	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2028	27	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2029	28	Operation	-\$1,595,967	\$78,893	\$8,542,911	\$6,651,805	\$15,273,609	\$13,677,642
2030	29	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2031	30	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2032	31	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2033	32	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2034	33	Operation	-\$1,595,967	\$279,934	\$6,683,231	\$6,651,805	\$13,614,969	\$12,019,002
2035	34	Operation	-\$1,595,967	\$279,934	\$6,683,231	\$6,651,805	\$13,614,969	\$12,019,002
2036	35	Operation	-\$1,595,967	\$279,934	\$6,683,231	\$6,651,805	\$13,614,969	\$12,019,002
2037	36	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2038	37	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2039	38	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2040	39	Operation	-\$1,595,967	\$78,893	\$8,542,911	\$6,651,805	\$15,273,609	\$13,677,642
2041	40	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2042	41	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2043	42	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2044	43	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2045	44	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2046	45	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2047	46	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2048	47	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2049	48	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354

Table D-4 (Continued)
Present Value of Change in Regional Income Due to Combination 2: PCAs 7, 4 and 5 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 7 Activity	Due to Change in Cattle Sales, Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2050	49	Operation	-\$1,595,967	\$279,934	\$6,683,231	\$6,651,805	\$13,614,969	\$12,019,002
2051	50	Operation	-\$1,595,967	\$288,311	\$15,226,142	\$6,651,805	\$22,166,257	\$20,570,290
2052	51	Operation	-\$1,595,967	\$279,934	\$6,683,231	\$6,651,805	\$13,614,969	\$12,019,002
2053	52	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2054	53	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2055	54	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2056	55	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2057	56	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2058	57	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2059	58	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2060	59	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
2061	60	Operation	-\$1,595,967	\$70,516	\$0	\$6,651,805	\$6,722,321	\$5,126,354
	Total Non-Discounted		-\$94,513,856	\$15,626,494	\$143,280,447	\$354,038,849	\$512,945,789	\$418,431,933
	Present Value at 3.2% discount rate							\$182,504,100

Table D-5
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 3: PCAs 7 and 1 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning & Implementation	\$2,046,150	\$0	\$0	\$2,046,150	0	0
2003	2	Planning & Implementation	\$3,019,033	\$0	\$0	\$3,019,033	0	0
2004	3	Planning & Implementation	\$3,378,121	\$0	\$0	\$3,378,121	0	0
2005	4	Planning, Implementation, Design, Construction (a)	\$1,788,806	\$19,404,355	\$7,823,713	\$29,016,873	97,006	59,992
2006	5	Design and Construction	\$1,085,210	\$14,152,154	\$15,662,255	\$30,899,619	194,301	120,153
2007	6	Design and Construction	\$1,030,451	\$14,567,902	\$23,515,626	\$39,113,979	291,886	180,482
2008	7	Design and Construction	\$806,323	\$32,509,142	\$31,383,827	\$64,699,291	389,761	240,979
2009	8	Design and Construction	\$728,774	\$24,214,517	\$31,413,485	\$56,356,776	390,340	241,316
2010	9	Design and Construction	\$724,601	\$19,210,441	\$31,443,144	\$51,378,187	390,919	241,653
2011	10	Design and Construction	\$727,237	\$12,171,283	\$33,636,917	\$46,535,438	461,070	303,718
2012	11	Design and Construction	\$687,698	\$12,171,283	\$33,666,576	\$46,525,558	461,649	304,055
2013	12	Design and Construction	\$674,938	\$6,416,927	\$33,696,235	\$40,788,100	462,228	304,391
2014	13	Operation	\$87,662	\$397,461	\$36,327,893	\$36,813,016	487,731	325,522
2015	14	Operation	\$87,662	\$397,461	\$36,357,552	\$36,842,675	488,311	325,859
2016	15	Operation	\$87,662	\$397,461	\$36,387,211	\$36,872,333	488,890	326,196
2017	16	Operation	\$87,662	\$397,461	\$36,416,870	\$36,901,992	489,469	326,533
2018	17	Operation	\$224,162	\$397,461	\$36,446,529	\$37,068,151	490,048	326,869
2019	18	Operation	\$87,662	\$397,461	\$36,476,187	\$36,961,310	490,628	327,206
2020	19	Operation	\$87,662	\$397,461	\$36,505,846	\$36,990,969	491,207	327,543
2021	20	Operation	\$87,662	\$397,461	\$36,535,505	\$37,020,627	491,786	327,880
2022	21	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2023	22	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880

Table D-5 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 3: PCAs 7 and 1 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2024	23	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2025	24	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2026	25	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2027	26	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2028	27	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2029	28	Operation	\$224,162	\$0	\$36,535,505	\$36,759,667	491,786	327,880
2030	29	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2031	30	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2032	31	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2033	32	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2034	33	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2035	34	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2036	35	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2037	36	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2038	37	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2039	38	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2040	39	Operation	\$224,162	\$0	\$36,535,505	\$36,759,667	491,786	327,880
2041	40	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2042	41	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2043	42	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2044	43	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2045	44	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2046	45	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880

Table D-5 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 3: PCAs 7 and 1 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2047	46	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2048	47	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2049	48	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2050	49	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2051	50	Operation	\$224,162	\$0	\$36,535,505	\$36,759,667	491,786	327,880
2052	51	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2053	52	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2054	53	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2055	54	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2056	55	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2057	56	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2058	57	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2059	58	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2060	59	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
2061	60	Operation	\$87,662	\$0	\$36,535,505	\$36,623,167	491,786	327,880
	Total Non-Discounted		\$21,451,103	\$157,997,690	\$1,995,115,574	\$2,174,564,367	26,728,670	17,725,537
	Present Value at 3.2% discount rate					\$934,368,074	10,582,248	6,980,269
	PV Cost per pound of P removed						\$88.30	\$133.86
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						445,478	295,426

^(a) Design and construction of the Taylor Creek / Nubbin Slough STA begins in year 4. Planning and implementation of the other RASTAs continues in year 4.

Table D-6
Present Value of Change in Regional Income Due to: Combination 3: PCAs 7 and 1 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning & Implementation	\$0	\$1,254,063	\$0	\$0	\$1,254,063	\$1,254,063
2003	2	Planning & Implementation	\$0	\$1,849,400	\$0	\$0	\$1,849,400	\$1,849,400
2004	3	Planning & Implementation	\$0	\$2,069,137	\$0	\$0	\$2,069,137	\$2,069,137
2005	4	Planning, Implementation, Design, Construction (a)	-\$7,612,341	\$1,095,109	\$10,180,065	\$2,893,521	\$14,168,695	\$6,556,353
2006	5	Design and Construction	-\$15,197,393	\$664,557	\$10,013,751	\$5,792,526	\$16,470,834	\$1,273,440
2007	6	Design and Construction	-\$22,729,806	\$631,048	\$11,188,279	\$8,697,016	\$20,516,342	-\$2,213,463
2008	7	Design and Construction	-\$22,978,469	\$493,535	\$4,453,672	\$11,606,990	\$16,554,197	-\$6,424,272
2009	8	Design and Construction	-\$23,073,498	\$446,080	\$4,408,181	\$11,617,959	\$16,472,220	-\$6,601,277
2010	9	Design and Construction	-\$23,168,526	\$443,527	\$3,502,341	\$11,628,928	\$15,574,796	-\$7,593,731
2011	10	Design and Construction	-\$23,263,555	\$445,140	\$2,228,109	\$12,918,335	\$15,591,584	-\$7,671,971
2012	11	Design and Construction	-\$23,358,584	\$420,945	\$2,228,109	\$12,929,304	\$15,578,358	-\$7,780,226
2013	12	Design and Construction	-\$23,453,612	\$413,136	\$1,186,453	\$12,940,273	\$14,539,862	-\$8,913,750
2014	13	Operation	-\$23,548,641	\$53,764	\$96,806	\$14,488,358	\$14,638,928	-\$8,909,713
2015	14	Operation	-\$23,643,670	\$53,764	\$96,806	\$14,499,327	\$14,649,897	-\$8,993,772
2016	15	Operation	-\$23,738,698	\$53,764	\$96,806	\$14,510,296	\$14,660,866	-\$9,077,832
2017	16	Operation	-\$23,833,727	\$53,764	\$96,806	\$14,521,265	\$14,671,835	-\$9,161,892
2018	17	Operation	-\$23,928,756	\$137,534	\$20,408,702	\$14,532,234	\$35,078,470	\$11,149,715
2019	18	Operation	-\$24,023,784	\$53,764	\$96,806	\$14,543,203	\$14,693,773	-\$9,330,011
2020	19	Operation	-\$24,118,813	\$53,764	\$96,806	\$14,554,172	\$14,704,742	-\$9,414,071
2021	20	Operation	-\$24,213,842	\$53,764	\$96,806	\$14,565,141	\$14,715,711	-\$9,498,131
2022	21	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2023	22	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937

Table D-6 (Continued)
Present Value of Change in Regional Income Due to: Combination 3: PCAs 7 and 1 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2025	24	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2026	25	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2027	26	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2028	27	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2029	28	Operation	-\$24,213,842	\$137,534	\$20,311,896	\$14,565,141	\$35,014,571	\$10,800,729
2030	29	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2031	30	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2032	31	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2033	32	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2034	33	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2035	34	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2036	35	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2037	36	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2038	37	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2039	38	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2040	39	Operation	-\$24,213,842	\$137,534	\$20,311,896	\$14,565,141	\$35,014,571	\$10,800,729
2041	40	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2042	41	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2043	42	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2044	43	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2045	44	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2046	45	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937

Table D-6 (Continued)
Present Value of Change in Regional Income Due to: Combination 3: PCAs 7 and 1 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2047	46	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2048	47	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2049	48	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2050	49	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2051	50	Operation	-\$24,213,842	\$137,534	\$20,311,896	\$14,565,141	\$35,014,571	\$10,800,729
2052	51	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2053	52	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2054	53	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2055	54	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2056	55	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2057	56	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2058	57	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2059	58	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2060	59	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
2061	60	Operation	-\$24,213,842	\$53,764	\$0	\$14,565,141	\$14,618,905	-\$9,594,937
	Total Non-Discounted		-\$1,344,439,387	\$13,141,409	\$131,410,993	\$789,844,509	\$934,396,911	-\$410,042,477
	Present Value at 3.2% discount rate							-\$150,997,875

Table D-7
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 4: PCAs 7 and 2 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning & Implementation	\$1,860,484	\$0	\$0	\$1,860,484	0	0
2003	2	Planning & Implementation	\$2,833,366	\$0	\$0	\$2,833,366	0	0
2004	3	Planning & Implementation	\$3,192,454	\$0	\$0	\$3,192,454	0	0
2005	4	Plan, Implement, Design, Construction (a)	\$1,788,806	\$54,519,530	\$2,763,136	\$59,071,472	68,348	40,921
2006	5	Design and Construction	\$1,085,210	\$49,285,665	\$5,544,093	\$55,914,969	136,952	81,994
2007	6	Design and Construction	\$1,030,451	\$49,701,413	\$8,342,870	\$59,074,735	205,813	123,218
2008	7	Design and Construction	\$806,323	\$32,503,030	\$11,159,468	\$44,468,821	274,929	164,593
2009	8	Design and Construction	\$728,774	\$24,208,405	\$11,195,109	\$36,132,288	275,440	164,896
2010	9	Design and Construction	\$724,601	\$19,204,329	\$11,230,750	\$31,159,681	275,952	165,199
2011	10	Design and Construction	\$727,237	\$12,165,171	\$13,430,505	\$26,322,913	354,168	234,402
2012	11	Design and Construction	\$687,698	\$12,165,171	\$13,466,146	\$26,319,015	354,680	234,704
2013	12	Design and Construction	\$674,938	\$6,410,815	\$13,501,787	\$20,587,540	355,192	235,007
2014	13	Operation	\$87,662	\$391,349	\$16,139,428	\$16,618,438	383,721	258,599
2015	14	Operation	\$87,662	\$391,349	\$16,175,068	\$16,654,079	384,233	258,902
2016	15	Operation	\$87,662	\$391,349	\$16,210,709	\$16,689,720	384,745	259,205
2017	16	Operation	\$87,662	\$391,349	\$16,246,350	\$16,725,361	385,257	259,507
2018	17	Operation	\$224,162	\$58,505,348	\$16,281,991	\$75,011,501	385,768	259,810
2019	18	Operation	\$87,662	\$391,349	\$16,317,632	\$16,796,642	386,280	260,113
2020	19	Operation	\$87,662	\$391,349	\$16,353,273	\$16,832,283	386,792	260,416
2021	20	Operation	\$87,662	\$391,349	\$16,388,914	\$16,867,924	387,304	260,719
2022	21	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2023	22	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719

Table D-7 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 4: PCAs 7 and 2 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2024	23	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2025	24	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2026	25	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2027	26	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2028	27	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2029	28	Operation	\$224,162	\$58,114,000	\$16,388,914	\$74,727,075	387,304	260,719
2030	29	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2031	30	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2032	31	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2033	32	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2034	33	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2035	34	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2036	35	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2037	36	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2038	37	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2039	38	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2040	39	Operation	\$224,162	\$58,114,000	\$16,388,914	\$74,727,075	387,304	260,719
2041	40	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2042	41	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2043	42	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2044	43	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2045	44	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2046	45	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2047	46	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719

Table D-7 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 4: PCAs 7 and 2 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2048	47	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2049	48	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2050	49	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2051	50	Operation	\$224,162	\$58,114,000	\$16,388,914	\$74,727,075	387,304	260,719
2052	51	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2053	52	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2054	53	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2055	54	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2056	55	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2057	56	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2058	57	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2059	58	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2060	59	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
2061	60	Operation	\$87,662	\$0	\$16,388,914	\$16,476,576	387,304	260,719
	Total Non-Discounted		\$20,894,103	\$495,750,317	\$876,303,787	\$1,392,948,206	20,877,728	13,950,948
	Present Value at 3.2% discount rate					\$658,868,987	8,198,846	5,437,542
	PV Cost per pound of P removed						\$80.36	\$121.17
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						347,962	232,516

^(a) Design and construction of the Taylor Creek / Nubbin Slough STA begins in year 4. Planning and implementation of the other RASTAs continues in year 4.

Table D-8
Present Value of Change in Regional Income Due to Combination 4: PCAs 7 and 2 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning & Implementation	\$0	\$1,140,119	\$0	\$0	\$1,140,119	\$1,140,119
2003	2	Planning & Implementation	\$0	\$1,735,456	\$0	\$0	\$1,735,456	\$1,735,456
2004	3	Planning & Implementation	\$0	\$1,955,193	\$0	\$0	\$1,955,193	\$1,955,193
2005	4	Planning, Implementation, Design, Construction (a)	-\$7,760,746	\$1,095,109	\$13,397,871	\$1,432,397	\$15,925,377	\$8,164,631
2006	5	Design and Construction	-\$15,491,353	\$664,557	\$13,096,858	\$2,874,033	\$16,635,447	\$1,144,094
2007	6	Design and Construction	-\$23,166,469	\$631,048	\$14,271,386	\$4,324,906	\$19,227,340	-\$3,939,129
2008	7	Design and Construction	-\$23,410,856	\$493,535	\$4,498,571	\$5,785,017	\$10,777,123	-\$12,633,732
2009	8	Design and Construction	-\$23,501,608	\$446,080	\$4,453,080	\$5,803,493	\$10,702,654	-\$12,798,954
2010	9	Design and Construction	-\$23,592,361	\$443,527	\$3,547,240	\$5,821,969	\$9,812,737	-\$13,779,624
2011	10	Design and Construction	-\$23,683,113	\$445,140	\$2,273,009	\$7,118,883	\$9,837,032	-\$13,846,082
2012	11	Design and Construction	-\$23,773,866	\$420,945	\$2,273,009	\$7,137,359	\$9,831,313	-\$13,942,553
2013	12	Design and Construction	-\$23,864,618	\$413,136	\$1,231,352	\$7,155,835	\$8,800,324	-\$15,064,294
2014	13	Operation	-\$23,955,371	\$53,764	\$141,706	\$8,711,428	\$8,906,897	-\$15,048,473
2015	14	Operation	-\$24,046,123	\$53,764	\$141,706	\$8,729,904	\$8,925,373	-\$15,120,750
2016	15	Operation	-\$24,136,876	\$53,764	\$141,706	\$8,748,380	\$8,943,849	-\$15,193,026
2017	16	Operation	-\$24,227,628	\$53,764	\$141,706	\$8,766,856	\$8,962,326	-\$15,265,303
2018	17	Operation	-\$24,318,381	\$137,534	\$21,184,554	\$8,785,332	\$30,107,420	\$5,789,039
2019	18	Operation	-\$24,409,133	\$53,764	\$141,706	\$8,803,808	\$8,999,278	-\$15,409,856
2020	19	Operation	-\$24,499,886	\$53,764	\$141,706	\$8,822,284	\$9,017,754	-\$15,482,132
2021	20	Operation	-\$24,590,638	\$53,764	\$141,706	\$8,840,760	\$9,036,230	-\$15,554,408
2022	21	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2023	22	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114

Table D-8 (Continued)
Present Value of Change in Regional Income Due to Combination 4: PCAs 7 and 2 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2025	24	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2026	25	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2027	26	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2028	27	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2029	28	Operation	-\$24,590,638	\$137,534	\$21,042,848	\$8,840,760	\$30,021,142	\$5,430,504
2030	29	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2031	30	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2032	31	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2033	32	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2034	33	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2035	34	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2036	35	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2037	36	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2038	37	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2039	38	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2040	39	Operation	-\$24,590,638	\$137,534	\$21,042,848	\$8,840,760	\$30,021,142	\$5,430,504
2041	40	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2042	41	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2043	42	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2044	43	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2045	44	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2046	45	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2047	46	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114

Table D-8 (Continued)
Present Value of Change in Regional Income Due to Combination 4: PCAs 7 and 2 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2049	48	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2050	49	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2051	50	Operation	-\$24,590,638	\$137,534	\$21,042,848	\$8,840,760	\$30,021,142	\$5,430,504
2052	51	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2053	52	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2054	53	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2055	54	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2056	55	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2057	56	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2058	57	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2059	58	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2060	59	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
2061	60	Operation	-\$24,590,638	\$53,764	\$0	\$8,840,760	\$8,894,524	-\$15,696,114
	Total Non-Discounted		-\$1,366,054,553	\$12,799,578	\$144,347,415	\$471,293,066	\$628,440,059	-\$737,614,494
	Present Value at 3.2% discount rate							-\$279,714,650

Table D-9
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 5: PCAs 7 and 3 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning & Implementation	\$1,347,741	\$0	\$0	\$1,347,741	0	0
2003	2	Planning & Implementation	\$2,320,624	\$0	\$0	\$2,320,624	0	0
2004	3	Planning & Implementation	\$2,679,712	\$0	\$0	\$2,679,712	0	0
2005	4	Planning, Implementation, Design, Construction (a)	\$1,652,306	\$17,814,512	\$13,430,616	\$32,897,433	425,348	265,534
2006	5	Design and Construction	\$948,710	\$13,754,694	\$13,436,862	\$28,140,266	426,540	266,229
2007	6	Design and Construction	\$893,951	\$14,170,441	\$13,443,109	\$28,507,502	427,731	266,924
2008	7	Design and Construction	\$874,573	\$32,111,681	\$13,449,356	\$46,435,610	428,922	267,620
2009	8	Design and Construction	\$797,024	\$23,817,056	\$13,455,603	\$38,069,683	430,114	268,315
2010	9	Design and Construction	\$792,851	\$18,812,981	\$13,461,849	\$33,067,681	431,305	269,010
2011	10	Design and Construction	\$795,487	\$11,773,823	\$15,632,210	\$28,201,520	499,490	329,161
2012	11	Design and Construction	\$755,948	\$11,773,823	\$15,638,457	\$28,168,228	500,681	329,856
2013	12	Design and Construction	\$743,188	\$6,019,467	\$15,644,704	\$22,407,358	501,873	330,551
2014	13	Operation	\$155,912	\$0	\$18,252,951	\$18,408,862	527,007	351,250
2015	14	Operation	\$155,912	\$0	\$18,259,197	\$18,415,109	528,199	351,945
2016	15	Operation	\$155,912	\$0	\$18,265,444	\$18,421,356	529,390	352,640
2017	16	Operation	\$155,912	\$0	\$18,271,691	\$18,427,603	530,581	353,335
2018	17	Operation	\$155,912	\$0	\$18,277,938	\$18,433,849	531,772	354,031
2019	18	Operation	\$155,912	\$0	\$18,284,184	\$18,440,096	532,964	354,726
2020	19	Operation	\$155,912	\$0	\$18,290,431	\$18,446,343	534,155	355,421
2021	20	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2022	21	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2023	22	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116

Table D-9 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 5: PCAs 7 and 3 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2024	23	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2025	24	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2026	25	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2027	26	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2028	27	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2029	28	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2030	29	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2031	30	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2032	31	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2033	32	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2034	33	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2035	34	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2036	35	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2037	36	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2038	37	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2039	38	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2040	39	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2041	40	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2042	41	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2043	42	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2044	43	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2045	44	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2046	45	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2047	46	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116

Table D-9 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 5: PCAs 7 and 3 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs)
with Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 7 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Cost	At Edge of Property	At Lake
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)
2048	47	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2049	48	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2050	49	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2051	50	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2052	51	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2053	52	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2054	53	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2055	54	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2056	55	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2057	56	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2058	57	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2059	58	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2060	59	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
2061	60	Operation	\$155,912	\$0	\$18,296,678	\$18,452,590	535,346	356,116
	Total Non-Discounted		\$22,085,876	\$150,048,477	\$1,005,658,398	\$1,177,792,750	29,735,269	19,667,310
	Present Value at 3.2% discount rate					\$538,070,815	12,074,546	7,940,592
	PV Cost per pound of P removed						\$44.56	\$67.76
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						495,588	327,788

^(a) Design and construction of the Taylor Creek / Nubbin Slough STA begins in year 4. Planning and implementation of the other RASTAs continues in year 4.

Table D-10
Present Value of Change in Regional Income Due to Combination 5: PCAs 7 and 3 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning & Implementation	\$0	\$825,440	\$0	\$0	\$825,440	\$825,440
2003	2	Planning & Implementation	\$0	\$1,420,777	\$0	\$0	\$1,420,777	\$1,420,777
2004	3	Planning & Implementation	\$0	\$1,640,514	\$0	\$0	\$1,640,514	\$1,640,514
2005	4	Planning, Implementation, Design, Construction (a)	-\$328,969	\$1,011,336	\$107,130	\$635,871	\$1,754,336	\$1,425,368
2006	5	Design and Construction	-\$567,296	\$580,784	\$231,234	\$643,081	\$1,455,099	\$887,803
2007	6	Design and Construction	-\$689,631	\$547,275	\$1,405,762	\$650,292	\$2,603,329	\$1,913,698
2008	7	Design and Construction	-\$843,265	\$535,417	\$4,356,866	\$657,502	\$5,549,785	\$4,706,519
2009	8	Design and Construction	-\$843,265	\$487,962	\$4,311,375	\$664,713	\$5,464,049	\$4,620,784
2010	9	Design and Construction	-\$843,265	\$485,409	\$3,405,535	\$671,923	\$4,562,866	\$3,719,601
2011	10	Design and Construction	-\$843,265	\$487,022	\$2,131,303	\$1,957,571	\$4,575,896	\$3,732,631
2012	11	Design and Construction	-\$843,265	\$462,827	\$2,131,303	\$1,964,782	\$4,558,911	\$3,715,646
2013	12	Design and Construction	-\$843,265	\$455,018	\$1,089,647	\$1,971,992	\$3,516,657	\$2,673,392
2014	13	Operation	-\$843,265	\$95,646	\$0	\$3,516,319	\$3,611,965	\$2,768,699
2015	14	Operation	-\$843,265	\$95,646	\$0	\$3,523,530	\$3,619,175	\$2,775,910
2016	15	Operation	-\$843,265	\$95,646	\$0	\$3,530,740	\$3,626,386	\$2,783,120
2017	16	Operation	-\$843,265	\$95,646	\$0	\$3,537,950	\$3,633,596	\$2,790,331
2018	17	Operation	-\$843,265	\$95,646	\$0	\$3,545,161	\$3,640,807	\$2,797,541
2019	18	Operation	-\$843,265	\$95,646	\$0	\$3,552,371	\$3,648,017	\$2,804,752
2020	19	Operation	-\$843,265	\$95,646	\$0	\$3,559,582	\$3,655,228	\$2,811,962
2021	20	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2022	21	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2023	22	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173

Table D-10 (Continued)
Present Value of Change in Regional Income Due to Combination 5: PCAs 7 and 3 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2025	24	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2026	25	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2027	26	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2028	27	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2029	28	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2030	29	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2031	30	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2032	31	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2033	32	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2034	33	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2035	34	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2036	35	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2037	36	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2038	37	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2039	38	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2040	39	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2041	40	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2042	41	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2043	42	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2044	43	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2045	44	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2046	45	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2047	46	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173

Table D-10 (Continued)
Present Value of Change in Regional Income Due to Combination 5: PCAs 7 and 3 –
Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
2048	47	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2049	48	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2050	49	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2051	50	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2052	51	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2053	52	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2054	53	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2055	54	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2056	55	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2057	56	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2058	57	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2059	58	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2060	59	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
2061	60	Operation	-\$843,265	\$95,646	\$0	\$3,566,792	\$3,662,438	\$2,819,173
	Total Non-Discounted		-\$47,122,216	\$13,530,771	\$19,170,154	\$180,821,865	\$213,522,790	\$166,400,574
	Present Value at 3.2% discount rate							\$71,510,193

Table D-11

Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed

Combination 6: PCAs 7 and 6 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Alternative Land Uses

Tracking Year	Year	PCA 7 Activity	Reduction in Land Value	Costs			Total Cost	Phosphorus Removed in Pounds	
				Public Costs	Capital Cost	Annual O&M Cost		At Edge of Property	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning & Implementation	\$0	\$1,347,741	\$0	\$0	\$1,347,741	0	0
2003	2	Planning & Implementation	\$0	\$2,320,624	\$0	\$0	\$2,320,624	0	0
2004	3	Planning & Implementation	\$0	\$2,679,712	\$0	\$0	\$2,679,712	0	0
2005	4	Planning, Implementation, Design, Construction ^(a)	\$0	\$1,925,306	\$17,814,512	\$0	\$19,739,818	0	0
2006	5	Design and Construction	\$69,439,739	\$1,631,210	\$26,082,776	\$0	\$97,153,725	0	0
2007	6	Design and Construction	\$69,439,739	\$1,576,451	\$26,524,895	\$0	\$97,541,086	13,384	8,165
2008	7	Design and Construction	\$69,439,739	\$1,557,073	\$44,492,507	\$0	\$115,489,319	27,091	16,532
2009	8	Design and Construction	\$69,439,739	\$1,479,524	\$36,224,255	\$0	\$107,143,517	41,121	25,099
2010	9	Design and Construction	\$69,439,739	\$1,475,351	\$31,246,551	\$0	\$102,161,641	55,473	33,868
2011	10	Design and Construction	\$69,439,739	\$1,477,987	\$24,233,765	\$2,164,114	\$97,315,605	157,503	120,247
2012	11	Design and Construction	\$2,362,851	\$755,948	\$11,773,823	\$2,164,114	\$17,056,736	176,406	131,771
2013	12	Design and Construction	\$2,362,851	\$743,188	\$6,019,467	\$2,164,114	\$11,289,619	179,993	133,973
2014	13	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	215,325	162,461
2015	14	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	219,026	164,735
2016	15	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	222,785	167,044
2017	16	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	226,601	169,390
2018	17	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	230,475	171,771
2019	18	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	234,406	174,188
2020	19	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	238,395	176,640
2021	20	Operation	\$2,362,851	\$155,912	\$0	\$4,766,114	\$7,284,877	242,440	179,128
2022	21	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	245,259	180,852
2023	22	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	248,078	182,576

Table D-11 (Continued)
Cost-Effectiveness Analysis – Present Value Cost per Pound of Phosphorus Removed
Combination 6: PCAs 7 and 6 – Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Alternative Land Uses

Tracking Year	Year	PCA 7 Activity	Reduction in Land Value	Costs			Total Cost	Phosphorus Removed in Pounds	
				Public Costs	Capital Cost	Annual O&M Cost		At Edge of Property	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2024	23	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	250,897	184,300
2025	24	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	253,715	186,024
2026	25	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	256,534	187,748
2027	26	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	259,353	189,472
2028	27	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	262,172	191,196
2029	28	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	264,990	192,920
2030	29	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2031	30	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2032	31	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2033	32	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2034	33	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2035	34	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2036	35	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2037	36	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2038	37	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2039	38	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2040	39	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2041	40	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2042	41	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2043	42	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2044	43	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2045	44	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2046	45	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2047	46	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644

Table D-11 (Continued)

Cost-Effectiveness Analysis – Present Value Cost per Pound of Phosphorus Removed

Combination 6: PCAs 7 and 6 – Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Alternative Land Uses

Tracking Year	Year	PCA 7 Activity	Reduction in Land Value	Costs			Total Cost	Phosphorus Removed in Pounds	
				Public Costs	Capital Cost	Annual O&M Cost		At Edge of Property	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2048	47	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2049	48	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2050	49	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2051	50	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2052	51	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2053	52	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2054	53	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2055	54	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2056	55	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2057	56	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2058	57	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2059	58	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2060	59	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
2061	60	Operation	\$0	\$155,912	\$0	\$4,766,114	\$4,922,026	267,809	194,644
Total Non-Discounted				\$26,453,876	\$224,412,551	\$235,265,814	\$926,399,181	13,091,315	9,558,695
Present Value at 3.2% discount rate							\$624,174,230	4,701,532	3,440,809
PV Cost per pound of P removed								\$132.76	\$181.40
Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)								218,189	159,312

^(a) Design and construction of the Taylor Creek / Nubbin Slough STA begins in year 4. Planning and implementation of the other RASTAs continues in year 4.

Table D-12
Present Value of Change in Regional Income Due to
Combination 6: PCAs 7 and 6 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Alternative Land Uses

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning & Implementation	\$0	\$825,449	\$0	\$0	\$825,449	\$825,449
2003	2	Planning & Implementation	\$0	\$1,420,786	\$0	\$0	\$1,420,786	\$1,420,786
2004	3	Planning & Implementation	\$0	\$1,640,523	\$0	\$0	\$1,640,523	\$1,640,523
2005	4	Planning, Implementation, Design, Construction (a)	-\$328,969	\$1,178,879	\$107,130	\$0	\$1,286,009	\$957,040
2006	5	Design and Construction	-\$234,885,701	\$999,637	\$231,234	\$0	\$1,230,871	-\$233,654,830
2007	6	Design and Construction	-\$237,787,280	\$966,128	\$1,405,762	\$0	\$2,371,890	-\$235,415,390
2008	7	Design and Construction	-\$240,739,098	\$954,270	\$4,356,866	\$0	\$5,311,136	-\$235,427,963
2009	8	Design and Construction	-\$243,556,222	\$906,815	\$4,311,375	\$0	\$5,218,190	-\$238,338,032
2010	9	Design and Construction	-\$246,392,286	\$904,262	\$3,405,535	\$0	\$4,309,797	-\$242,082,490
2011	10	Design and Construction	-\$249,247,290	\$905,875	\$2,131,303	\$1,278,438	\$4,315,616	-\$244,931,674
2012	11	Design and Construction	-\$250,928,366	\$462,830	\$2,131,303	\$1,278,438	\$3,872,570	-\$247,055,795
2013	12	Design and Construction	-\$252,609,441	\$455,021	\$1,089,647	\$1,278,438	\$2,823,106	-\$249,786,335
2014	13	Operation	-\$254,290,517	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$251,379,314
2015	14	Operation	-\$255,971,592	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$253,060,389
2016	15	Operation	-\$257,652,668	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$254,741,465
2017	16	Operation	-\$259,333,743	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$256,422,540
2018	17	Operation	-\$261,014,819	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$258,103,616
2019	18	Operation	-\$262,695,894	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$259,784,691
2020	19	Operation	-\$264,376,970	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$261,465,767
2021	20	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2022	21	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2023	22	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842

Table D-12 (Continued)
Present Value of Change in Regional Income Due to
Combination 6: PCAs 7 and 6 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Alternative Land Uses

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2025	24	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2026	25	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2027	26	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2028	27	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2029	28	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2030	29	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2031	30	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2032	31	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2033	32	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2034	33	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2035	34	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2036	35	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2037	36	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2038	37	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2039	38	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2040	39	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2041	40	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2042	41	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2043	42	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2044	43	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2045	44	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2046	45	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2047	46	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842

Table D-12 (Continued)
Present Value of Change in Regional Income Due to
Combination 6: PCAs 7 and 6 - Reservoir-Assisted Stormwater Treatment Areas (RASTAs) with Alternative Land Uses

Tracking Year	Year	PCA 7 Activity	Due to Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From Public Costs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2049	48	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2050	49	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2051	50	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2052	51	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2053	52	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2054	53	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2055	54	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2056	55	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2057	56	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2058	57	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2059	58	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2060	59	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
2061	60	Operation	-\$266,058,045	\$95,649	\$0	\$2,815,554	\$2,911,203	-\$263,146,842
	Total Non-Discounted		-\$14,680,190,704	\$16,211,611	\$19,170,154	\$138,981,911	\$174,363,675	-\$14,505,827,029
	Present Value at 3.2% discount rate							-\$5,834,223,199

Table D-13
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 7: PCAs 10 and 11 - Terminal Large Scale Water Treatment Facility
with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 10 Activity	Costs					Phosphorus Removed in Pounds	
			Reduction in Land Value	Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	Planning and Research	\$0	\$865,434	\$0	\$0	\$865,434	0	0
2003	2	Planning and Research	\$0	\$865,434	\$0	\$0	\$865,434	0	0
2004	3	Planning and Research	\$0	\$865,434	\$0	\$0	\$865,434	0	0
2005	4	Design and Permitting	\$56,000,000	\$565,861	\$27,272,479	\$1,144,351	\$84,982,691	0	0
2006	5	Design and Permitting	\$56,000,000	\$926,972	\$27,272,479	\$2,288,702	\$86,488,153	73,029	44,177
2007	6	Design and Permitting	\$56,000,000	\$1,288,083	\$27,272,479	\$3,433,053	\$87,993,615	146,058	88,353
2008	7	Construction	\$0	\$1,356,333	\$42,087,520	\$3,433,053	\$46,876,907	219,086	132,530
2009	8	Construction	\$0	\$1,356,333	\$42,087,520	\$3,433,053	\$46,876,907	219,086	132,530
2010	9	Construction	\$0	\$1,356,333	\$42,087,520	\$3,433,053	\$46,876,907	219,086	132,530
2011	10	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2012	11	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2013	12	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2014	13	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2015	14	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2016	15	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2017	16	Operation	\$0	\$1,151,583	\$2,538,000	\$16,574,353	\$20,263,937	325,045	238,488
2018	17	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2019	18	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2020	19	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2021	20	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2022	21	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2023	22	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488

Table D-13 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 7: PCAs 10 and 11 - Terminal Large Scale Water Treatment Facility
with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 10 Activity	Costs					Phosphorus Removed in Pounds	
			Reduction in Land Value	Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2024	23	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2025	24	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2026	25	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2027	26	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2028	27	Operation	\$0	\$1,151,583	\$22,238,000	\$16,574,353	\$39,963,937	325,045	238,488
2029	28	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2030	29	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2031	30	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2032	31	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2033	32	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2034	33	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2035	34	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2036	35	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2037	36	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2038	37	Operation	\$0	\$1,151,583	\$2,538,000	\$16,574,353	\$20,263,937	325,045	238,488
2039	38	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2040	39	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2041	40	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2042	41	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2043	42	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2044	43	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2045	44	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2046	45	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2047	46	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488

Table D-13 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 7: PCAs 10 and 11 - Terminal Large Scale Water Treatment Facility
with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 10 Activity	Costs					Phosphorus Removed in Pounds	
			Reduction in Land Value	Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2048	47	Operation	\$0	\$1,151,583	\$22,238,000	\$16,574,353	\$39,963,937	325,045	238,488
2049	48	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2050	49	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2051	50	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2052	51	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2053	52	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2054	53	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2055	54	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2056	55	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2057	56	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2058	57	Operation	\$0	\$1,151,583	\$2,538,000	\$16,574,353	\$20,263,937	325,045	238,488
2059	58	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2060	59	Operation	\$0	\$1,151,583	\$0	\$16,574,353	\$17,725,937	325,045	238,488
2061	60	Operation	\$0	\$1,151,583	-\$7,940,400	\$16,574,353	\$9,785,537	325,045	238,488
	Total - Non-Discounted			\$68,176,968	\$252,229,596	\$862,457,294	\$1,350,863,858	17,453,644	12,693,028
	Present Value at 3.2% discount rate						\$683,042,416	6,809,922	4,907,079
	PV cost per pound of P removed							\$100.30	\$139.20
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							290,894	211,550

Table D-14
Present Value of Change in Regional Income Due to: Combination 7: PCAs 10 and 11 –
Terminal Large Scale Water Treatment Facility with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 10 Activity	Due to Change in Cattle Sales and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$0	\$638,783	\$0	\$0	\$638,783	\$638,783
2003	2	Planning and Research	\$0	\$638,783	\$0	\$0	\$638,783	\$638,783
2004	3	Planning and Research	\$0	\$638,783	\$0	\$0	\$638,783	\$638,783
2005	4	Design and Permitting	\$0	\$512,730	\$6,654,783	\$416,495	\$7,584,008	\$7,584,008
2006	5	Design and Permitting	-\$1,783,169	\$899,805	\$6,654,783	\$832,990	\$8,387,578	\$6,604,409
2007	6	Design and Permitting	-\$3,566,337	\$1,286,880	\$6,654,783	\$1,249,484	\$9,191,148	\$5,624,810
2008	7	Construction	-\$5,492,288	\$1,328,765	\$8,950,051	\$1,249,484	\$11,528,300	\$6,036,012
2009	8	Construction	-\$5,635,070	\$1,328,765	\$8,950,051	\$1,249,484	\$11,528,300	\$5,893,230
2010	9	Construction	-\$5,777,852	\$1,328,765	\$8,950,051	\$1,249,484	\$11,528,300	\$5,750,449
2011	10	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2012	11	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2013	12	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2014	13	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2015	14	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2016	15	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2017	16	Operation	-\$5,777,852	\$1,203,110	\$626,140	\$3,780,459	\$5,609,709	-\$168,142
2018	17	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2019	18	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2020	19	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2021	20	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2022	21	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2023	22	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283

Table D-14 (Continued)
Present Value of Change in Regional Income Due to: Combination 7: PCAs 10 and 11 –
Terminal Large Scale Water Treatment Facility with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 10 Activity	Due to Change in Cattle Sales and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2025	24	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2026	25	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2027	26	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2028	27	Operation	-\$5,777,852	\$1,203,110	\$5,486,254	\$3,780,459	\$10,469,822	\$4,691,971
2029	28	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2030	29	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2031	30	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2032	31	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2033	32	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2034	33	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2035	34	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2036	35	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2037	36	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2038	37	Operation	-\$5,777,852	\$1,203,110	\$626,140	\$3,780,459	\$5,609,709	-\$168,142
2039	38	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2040	39	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2041	40	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2042	41	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2043	42	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2044	43	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2045	44	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2046	45	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2047	46	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283

Table D-14 (Continued)
Present Value of Change in Regional Income Due to: Combination 7: PCAs 10 and 11 –
Terminal Large Scale Water Treatment Facility with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 10 Activity	Due to Change in Cattle Sales and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	-\$5,777,852	\$1,203,110	\$5,486,254	\$3,780,459	\$10,469,822	\$4,691,971
2049	48	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2050	49	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2051	50	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2052	51	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2053	52	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2054	53	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2055	54	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2056	55	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2057	56	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2058	57	Operation	-\$5,777,852	\$1,203,110	\$626,140	\$3,780,459	\$5,609,709	-\$168,142
2059	58	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2060	59	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
2061	60	Operation	-\$5,777,852	\$1,203,110	\$0	\$3,780,459	\$4,983,569	-\$794,283
	Total Non-Discounted		-\$316,925,143	\$69,960,670	\$59,665,430	\$199,050,809	\$328,676,910	\$11,751,767
	Present Value at 3.2% discount rate							\$21,862,963

Table D-15
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 8: PCAs 10, 4 and 5 - Terminal Large Scale Water Treatment Facility
with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$1,362,530	\$0	\$0	\$1,362,530	0	0
2003	2	Planning and Research	\$1,362,530	\$0	\$0	\$1,362,530	0	0
2004	3	Planning and Research	\$1,362,530	\$0	\$0	\$1,362,530	0	0
2005	4	Design and Permitting	\$659,750	\$25,127,185	\$3,414,033	\$29,200,968	138,673	81,680
2006	5	Design and Permitting	\$659,750	\$25,089,216	\$6,809,375	\$32,558,342	276,245	162,710
2007	6	Design and Permitting	\$659,750	\$25,051,248	\$10,186,028	\$35,897,026	412,714	243,092
2008	7	Construction	\$368,550	\$42,087,520	\$13,600,769	\$56,056,839	422,324	248,752
2009	8	Construction	\$368,550	\$42,087,520	\$13,572,734	\$56,028,804	422,005	248,564
2010	9	Construction	\$368,550	\$42,087,520	\$13,544,699	\$56,000,769	421,686	248,376
2011	10	Operation	\$163,800	\$0	\$26,657,964	\$26,821,764	523,200	350,021
2012	11	Operation	\$163,800	\$0	\$26,629,929	\$26,793,729	522,881	349,833
2013	12	Operation	\$163,800	\$0	\$26,601,894	\$26,765,694	522,562	349,646
2014	13	Operation	\$163,800	\$0	\$26,573,859	\$26,737,659	522,243	349,458
2015	14	Operation	\$163,800	\$0	\$26,545,824	\$26,709,624	521,924	349,270
2016	15	Operation	\$163,800	\$0	\$26,517,789	\$26,681,589	521,605	349,082
2017	16	Operation	\$163,800	\$0	\$26,489,754	\$26,653,554	521,286	348,894
2018	17	Operation	\$177,450	\$22,563,000	\$26,461,719	\$49,202,169	520,967	348,706
2019	18	Operation	\$505,050	\$10,251,841	\$26,433,684	\$37,190,575	520,648	348,518
2020	19	Operation	\$505,050	\$10,213,872	\$26,405,649	\$37,124,572	520,329	348,330
2021	20	Operation	\$505,050	\$10,175,903	\$26,377,615	\$37,058,568	520,010	348,142
2022	21	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	521,344	348,928
2023	22	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	522,678	349,714

Table D-15 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 8: PCAs 10, 4 and 5 - Terminal Large Scale Water Treatment Facility
with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	524,011	350,499
2025	24	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	525,345	351,285
2026	25	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	526,679	352,070
2027	26	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2028	27	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2029	28	Operation	\$177,450	\$22,563,000	\$26,377,615	\$49,118,065	528,013	352,856
2030	29	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2031	30	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2032	31	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2033	32	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2034	33	Operation	\$505,050	\$10,175,903	\$26,377,615	\$37,058,568	528,013	352,856
2035	34	Operation	\$505,050	\$10,175,903	\$26,377,615	\$37,058,568	528,013	352,856
2036	35	Operation	\$505,050	\$10,175,903	\$26,377,615	\$37,058,568	528,013	352,856
2037	36	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2038	37	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2039	38	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2040	39	Operation	\$177,450	\$22,563,000	\$26,377,615	\$49,118,065	528,013	352,856
2041	40	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2042	41	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2043	42	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2044	43	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2045	44	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2046	45	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2047	46	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856

Table D-15 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 8: PCAs 10, 4 and 5 - Terminal Large Scale Water Treatment Facility
with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2049	48	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2050	49	Operation	\$505,050	\$10,175,903	\$26,377,615	\$37,058,568	528,013	352,856
2051	50	Operation	\$518,700	\$32,738,903	\$26,377,615	\$59,635,218	528,013	352,856
2052	51	Operation	\$505,050	\$10,175,903	\$26,377,615	\$37,058,568	528,013	352,856
2053	52	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2054	53	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2055	54	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2056	55	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2057	56	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2058	57	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2059	58	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2060	59	Operation	\$163,800	\$0	\$26,377,615	\$26,541,415	528,013	352,856
2061	60	Operation	\$163,800	-\$10,175,903	\$26,377,615	\$16,365,511	528,013	352,856
Total - Non-Discounted			\$18,652,141	\$373,303,342	\$1,407,927,901	\$1,799,883,384	28,931,806	19,175,528
Present Value at 3.2% discount rate						\$785,266,277	11,565,232	7,599,448
PV cost per pound of P removed							\$67.90	\$103.33
Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							482,197	319,592

Table D-16
Present Value of Change in Regional Income Due to: Combination 8: PCAs 10, 4 and 5 –
Terminal Large Scale Water Treatment Facility with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 10 Activity	From Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$0	\$748,033	\$0	\$0	\$748,033	\$748,033
2003	2	Planning and Research	\$0	\$748,033	\$0	\$0	\$748,033	\$748,033
2004	3	Planning and Research	\$0	\$748,033	\$0	\$0	\$748,033	\$748,033
2005	4	Design and Permitting	-\$972,979	\$404,880	\$11,539,572	\$1,192,404	\$13,136,855	\$12,163,877
2006	5	Design and Permitting	-\$1,939,106	\$404,880	\$11,514,635	\$2,379,185	\$14,298,700	\$12,359,594
2007	6	Design and Permitting	-\$2,898,381	\$404,880	\$11,489,698	\$3,560,344	\$15,454,922	\$12,556,541
2008	7	Construction	-\$1,029,094	\$226,178	\$8,950,051	\$3,945,891	\$13,122,119	\$12,093,025
2009	8	Construction	-\$1,161,598	\$226,178	\$8,950,051	\$3,937,457	\$13,113,685	\$11,952,087
2010	9	Construction	-\$1,294,102	\$226,178	\$8,950,051	\$3,929,023	\$13,105,251	\$11,811,149
2011	10	Operation	-\$1,283,825	\$100,523	\$0	\$6,451,563	\$6,552,086	\$5,268,261
2012	11	Operation	-\$1,273,547	\$100,523	\$0	\$6,443,129	\$6,543,652	\$5,270,105
2013	12	Operation	-\$1,263,269	\$100,523	\$0	\$6,434,696	\$6,535,218	\$5,271,949
2014	13	Operation	-\$1,252,991	\$100,523	\$0	\$6,426,262	\$6,526,784	\$5,273,793
2015	14	Operation	-\$1,242,714	\$100,523	\$0	\$6,417,828	\$6,518,350	\$5,275,637
2016	15	Operation	-\$1,232,436	\$100,523	\$0	\$6,409,394	\$6,509,917	\$5,277,481
2017	16	Operation	-\$1,222,158	\$100,523	\$0	\$6,400,960	\$6,501,483	\$5,279,324
2018	17	Operation	-\$1,211,881	\$108,900	\$8,542,911	\$6,392,526	\$15,044,337	\$13,832,456
2019	18	Operation	-\$1,201,603	\$309,940	\$6,733,104	\$6,384,092	\$13,427,137	\$12,225,534
2020	19	Operation	-\$1,191,325	\$309,940	\$6,708,168	\$6,375,659	\$13,393,766	\$12,202,441
2021	20	Operation	-\$1,181,047	\$309,940	\$6,683,231	\$6,367,225	\$13,360,396	\$12,179,348
2022	21	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2023	22	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700

Table D-16 (Continued)
Present Value of Change in Regional Income Due to: Combination 8: PCAs 10, 4 and 5 –
Terminal Large Scale Water Treatment Facility with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 10 Activity	From Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2025	24	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2026	25	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2027	26	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2028	27	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2029	28	Operation	-\$1,181,047	\$108,900	\$8,542,911	\$6,367,225	\$15,019,035	\$13,837,988
2030	29	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2031	30	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2032	31	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2033	32	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2034	33	Operation	-\$1,181,047	\$309,940	\$6,683,231	\$6,367,225	\$13,360,396	\$12,179,348
2035	34	Operation	-\$1,181,047	\$309,940	\$6,683,231	\$6,367,225	\$13,360,396	\$12,179,348
2036	35	Operation	-\$1,181,047	\$309,940	\$6,683,231	\$6,367,225	\$13,360,396	\$12,179,348
2037	36	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2038	37	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2039	38	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2040	39	Operation	-\$1,181,047	\$108,900	\$8,542,911	\$6,367,225	\$15,019,035	\$13,837,988
2041	40	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2042	41	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2043	42	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2044	43	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2045	44	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2046	45	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2047	46	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700

Table D-16 (Continued)
Present Value of Change in Regional Income Due to: Combination 8: PCAs 10, 4 and 5 –
Terminal Large Scale Water Treatment Facility with Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 10 Activity	From Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2049	48	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2050	49	Operation	-\$1,181,047	\$309,940	\$6,683,231	\$6,367,225	\$13,360,396	\$12,179,348
2051	50	Operation	-\$1,181,047	\$318,317	\$15,226,142	\$6,367,225	\$21,911,684	\$20,730,636
2052	51	Operation	-\$1,181,047	\$309,940	\$6,683,231	\$6,367,225	\$13,360,396	\$12,179,348
2053	52	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2054	53	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2055	54	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2056	55	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2057	56	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2058	57	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2059	58	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2060	59	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
2061	60	Operation	-\$1,181,047	\$100,523	\$0	\$6,367,225	\$6,467,747	\$5,286,700
	Total Non-Discounted		-\$70,093,955	\$11,182,188	\$155,789,589	\$344,136,626	\$511,108,403	\$441,014,448
	Present Value at 3.2% discount rate							\$196,671,115

Table D-17
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 9: PCAs 10 and 1 - Terminal Large Scale Water Treatment Facility
with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$1,545,992	\$0	\$0	\$1,545,992	0	0
2003	2	Planning and Research	\$1,545,992	\$0	\$0	\$1,545,992	0	0
2004	3	Planning and Research	\$1,545,992	\$0	\$0	\$1,545,992	0	0
2005	4	Design and Permitting	\$477,750	\$48,179,581	\$7,823,713	\$56,481,043	97,006	59,992
2006	5	Design and Permitting	\$477,750	\$46,987,199	\$15,662,255	\$63,127,203	194,301	120,153
2007	6	Design and Permitting	\$477,750	\$46,987,199	\$23,515,626	\$70,980,575	291,886	180,482
2008	7	Construction	\$341,250	\$42,484,981	\$31,383,827	\$74,210,057	389,761	240,979
2009	8	Construction	\$341,250	\$42,484,981	\$31,413,485	\$74,239,716	390,340	241,316
2010	9	Construction	\$341,250	\$42,484,981	\$31,443,144	\$74,269,375	390,919	241,653
2011	10	Operation	\$136,500	\$397,461	\$44,614,103	\$45,148,064	494,642	345,133
2012	11	Operation	\$136,500	\$397,461	\$44,643,762	\$45,177,722	495,221	345,470
2013	12	Operation	\$136,500	\$397,461	\$44,673,421	\$45,207,381	495,801	345,807
2014	13	Operation	\$136,500	\$397,461	\$44,703,079	\$45,237,040	496,380	346,144
2015	14	Operation	\$136,500	\$397,461	\$44,732,738	\$45,266,699	496,959	346,480
2016	15	Operation	\$136,500	\$397,461	\$44,762,397	\$45,296,358	497,538	346,817
2017	16	Operation	\$136,500	\$397,461	\$44,792,056	\$45,326,017	498,117	347,154
2018	17	Operation	\$273,000	\$83,792,721	\$44,821,715	\$128,887,436	498,697	347,491
2019	18	Operation	\$136,500	\$397,461	\$44,851,373	\$45,385,334	499,276	347,828
2020	19	Operation	\$136,500	\$397,461	\$44,881,032	\$45,414,993	499,855	348,164
2021	20	Operation	\$136,500	\$397,461	\$44,910,691	\$45,444,652	500,434	348,501
2022	21	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2023	22	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501

Table D-17 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 9: PCAs 10 and 1 - Terminal Large Scale Water Treatment Facility
with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2025	24	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2026	25	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2027	26	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2028	27	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2029	28	Operation	\$273,000	\$83,395,261	\$44,910,691	\$128,578,952	500,434	348,501
2030	29	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2031	30	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2032	31	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2033	32	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2034	33	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2035	34	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2036	35	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2037	36	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2038	37	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2039	38	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2040	39	Operation	\$273,000	\$83,395,261	\$44,910,691	\$128,578,952	500,434	348,501
2041	40	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2042	41	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2043	42	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2044	43	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2045	44	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2046	45	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2047	46	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501

Table D-17 (Continued)
Cost-Effectiveness Analysis - Present Value Cost per Pound of Phosphorus Removed
Combination 9: PCAs 10 and 1 - Terminal Large Scale Water Treatment Facility
with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2049	48	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2050	49	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2051	50	Operation	\$273,000	\$83,395,261	\$44,910,691	\$128,578,952	500,434	348,501
2052	51	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2053	52	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2054	53	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2055	54	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2056	55	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2057	56	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2058	57	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2059	58	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2060	59	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
2061	60	Operation	\$136,500	\$0	\$44,910,691	\$45,047,191	500,434	348,501
	Total - Non-Discounted		\$14,602,477	\$607,562,030	\$2,430,056,060	\$3,052,220,567	27,244,506	18,839,607
	Present Value at 3.2% discount rate					\$1,314,425,818	10,797,856	7,412,381
	PV cost per pound of P removed						\$121.73	\$177.33
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						454,075	313,993

Table D-18
Present Value of Change in Regional Income Due to: Combination 9: PCAs 10 and 1 –
Terminal Large Scale Water Treatment Facility with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$0	\$860,630	\$0	\$0	\$860,630	\$860,630
2003	2	Planning and Research	\$0	\$860,630	\$0	\$0	\$860,630	\$860,630
2004	3	Planning and Research	\$0	\$860,630	\$0	\$0	\$860,630	\$860,630
2005	4	Design and Permitting	-\$7,283,373	\$293,195	\$11,682,650	\$2,893,521	\$14,869,366	\$7,585,993
2006	5	Design and Permitting	-\$14,630,098	\$293,195	\$11,392,231	\$5,792,526	\$17,477,953	\$2,847,855
2007	6	Design and Permitting	-\$22,040,175	\$293,195	\$11,392,231	\$8,697,016	\$20,382,442	-\$1,657,733
2008	7	Construction	-\$22,277,986	\$209,425	\$9,046,857	\$11,606,990	\$20,863,272	-\$1,414,713
2009	8	Construction	-\$22,515,796	\$209,425	\$9,046,857	\$11,617,959	\$20,874,241	-\$1,641,555
2010	9	Construction	-\$22,753,607	\$209,425	\$9,046,857	\$11,628,928	\$20,885,210	-\$1,868,396
2011	10	Operation	-\$22,848,635	\$83,770	\$96,806	\$14,170,872	\$14,351,448	-\$8,497,188
2012	11	Operation	-\$22,943,664	\$83,770	\$96,806	\$14,181,841	\$14,362,417	-\$8,581,247
2013	12	Operation	-\$23,038,693	\$83,770	\$96,806	\$14,192,810	\$14,373,386	-\$8,665,307
2014	13	Operation	-\$23,133,721	\$83,770	\$96,806	\$14,203,779	\$14,384,355	-\$8,749,367
2015	14	Operation	-\$23,228,750	\$83,770	\$96,806	\$14,214,748	\$14,395,324	-\$8,833,426
2016	15	Operation	-\$23,323,779	\$83,770	\$96,806	\$14,225,717	\$14,406,293	-\$8,917,486
2017	16	Operation	-\$23,418,807	\$83,770	\$96,806	\$14,236,686	\$14,417,262	-\$9,001,546
2018	17	Operation	-\$23,513,836	\$167,540	\$20,408,702	\$14,247,655	\$34,823,897	\$11,310,061
2019	18	Operation	-\$23,608,865	\$83,770	\$96,806	\$14,258,624	\$14,439,200	-\$9,169,665
2020	19	Operation	-\$23,703,893	\$83,770	\$96,806	\$14,269,593	\$14,450,169	-\$9,253,725
2021	20	Operation	-\$23,798,922	\$83,770	\$96,806	\$14,280,562	\$14,461,138	-\$9,337,784
2022	21	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2023	22	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2024	23	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591

Table D-18 (Continued)
Present Value of Change in Regional Income Due to: Combination 9: PCAs 10 and 1 –
Terminal Large Scale Water Treatment Facility with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2026	25	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2027	26	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2028	27	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2029	28	Operation	-\$23,798,922	\$167,540	\$20,311,896	\$14,280,562	\$34,759,998	\$10,961,076
2030	29	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2031	30	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2032	31	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2033	32	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2034	33	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2035	34	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2036	35	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2037	36	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2038	37	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2039	38	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2040	39	Operation	-\$23,798,922	\$167,540	\$20,311,896	\$14,280,562	\$34,759,998	\$10,961,076
2041	40	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2042	41	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2043	42	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2044	43	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2045	44	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2046	45	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2047	46	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591

Table D-18 (Continued)
Present Value of Change in Regional Income Due to: Combination 9: PCAs 10 and 1 –
Terminal Large Scale Water Treatment Facility with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2049	48	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2050	49	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2051	50	Operation	-\$23,798,922	\$167,540	\$20,311,896	\$14,280,562	\$34,759,998	\$10,961,076
2052	51	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2053	52	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2054	53	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2055	54	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2056	55	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2057	56	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2058	57	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2059	58	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2060	59	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
2061	60	Operation	-\$23,798,922	\$83,770	\$0	\$14,280,562	\$14,364,332	-\$9,434,591
	Total Non-Discounted		-\$1,320,019,486	\$8,697,103	\$143,920,136	\$779,942,286	\$932,559,525	-\$387,459,961
	Present Value at 3.2% discount rate							-\$136,830,860

Table D-19
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 10: PCAs 10 and 2 - Terminal Large Scale Water Treatment Facility
with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$1,360,326	\$0	\$0	\$1,360,326	0	0
2003	2	Planning and Research	\$1,360,326	\$0	\$0	\$1,360,326	0	0
2004	3	Planning and Research	\$1,360,326	\$0	\$0	\$1,360,326	0	0
2005	4	Design and Permitting	\$477,750	\$41,962,403	\$2,763,136	\$45,203,290	68,348	40,921
2006	5	Design and Permitting	\$477,750	\$41,962,403	\$5,544,093	\$47,984,246	136,952	81,994
2007	6	Design and Permitting	\$477,750	\$41,962,403	\$8,342,870	\$50,783,024	205,813	123,218
2008	7	Construction	\$341,250	\$42,087,520	\$11,159,468	\$53,588,238	274,929	164,593
2009	8	Construction	\$341,250	\$42,087,520	\$11,195,109	\$53,623,879	275,440	164,896
2010	9	Construction	\$341,250	\$42,087,520	\$11,230,750	\$53,659,520	275,952	165,199
2011	10	Operation	\$136,500	\$0	\$24,407,691	\$24,544,191	391,445	280,483
2012	11	Operation	\$136,500	\$0	\$24,443,332	\$24,579,832	391,957	280,785
2013	12	Operation	\$136,500	\$0	\$24,478,973	\$24,615,473	392,469	281,088
2014	13	Operation	\$136,500	\$0	\$24,514,614	\$24,651,114	392,981	281,391
2015	14	Operation	\$136,500	\$0	\$24,550,254	\$24,686,754	393,492	281,694
2016	15	Operation	\$136,500	\$0	\$24,585,895	\$24,722,395	394,004	281,997
2017	16	Operation	\$136,500	\$0	\$24,621,536	\$24,758,036	394,516	282,299
2018	17	Operation	\$273,000	\$58,114,000	\$24,657,177	\$83,044,177	395,028	282,602
2019	18	Operation	\$136,500	\$0	\$24,692,818	\$24,829,318	395,540	282,905
2020	19	Operation	\$136,500	\$0	\$24,728,459	\$24,864,959	396,051	283,208
2021	20	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2022	21	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2023	22	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2024	23	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511

Table D-19 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 10: PCAs 10 and 2 - Terminal Large Scale Water Treatment Facility
with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2026	25	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2027	26	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2028	27	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2029	28	Operation	\$273,000	\$58,114,000	\$24,764,100	\$83,151,100	396,563	283,511
2030	29	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2031	30	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2032	31	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2033	32	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2034	33	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2035	34	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2036	35	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2037	36	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2038	37	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2039	38	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2040	39	Operation	\$273,000	\$58,114,000	\$24,764,100	\$83,151,100	396,563	283,511
2041	40	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2042	41	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2043	42	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2044	43	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2045	44	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2046	45	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2047	46	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511

Table D-19 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 10: PCAs 10 and 2 - Terminal Large Scale Water Treatment Facility
with Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2049	48	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2050	49	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2051	50	Operation	\$273,000	\$58,114,000	\$24,764,100	\$83,151,100	396,563	283,511
2052	51	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2053	52	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2054	53	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2055	54	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2056	55	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2057	56	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2058	57	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2059	58	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2060	59	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
2061	60	Operation	\$136,500	\$0	\$24,764,100	\$24,900,600	396,563	283,511
	Total - Non-Discounted		\$14,045,477	\$484,605,768	\$1,311,244,273	\$1,809,895,518	21,434,010	15,183,207
	Present Value at 3.2% discount rate					\$806,307,863	8,432,517	5,915,789
	PV cost per pound of P removed						\$95.62	\$136.30
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						357,234	253,053

Table D-20
Present Value of Change in Regional Income Due to:
Combination 10: PCAs 10 and 2 - Terminal Large Scale Water Treatment Facility with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$0	\$746,686	\$0	\$0	\$746,686	\$746,686
2003	2	Planning and Research	\$0	\$746,686	\$0	\$0	\$746,686	\$746,686
2004	3	Planning and Research	\$0	\$746,686	\$0	\$0	\$746,686	\$746,686
2005	4	Design and Permitting	-\$7,431,778	\$293,195	\$14,900,456	\$1,432,397	\$16,626,048	\$9,194,270
2006	5	Design and Permitting	-\$14,924,057	\$293,195	\$14,475,338	\$2,874,033	\$17,642,566	\$2,718,509
2007	6	Design and Permitting	-\$22,476,838	\$293,195	\$14,475,338	\$4,324,906	\$19,093,439	-\$3,383,399
2008	7	Construction	-\$22,710,372	\$209,425	\$9,091,756	\$5,785,017	\$15,086,199	-\$7,624,174
2009	8	Construction	-\$22,943,907	\$209,425	\$9,091,756	\$5,803,493	\$15,104,675	-\$7,839,232
2010	9	Construction	-\$23,177,441	\$209,425	\$9,091,756	\$5,821,969	\$15,123,151	-\$8,054,290
2011	10	Operation	-\$23,268,194	\$83,770	\$141,706	\$8,371,420	\$8,596,896	-\$14,671,298
2012	11	Operation	-\$23,358,946	\$83,770	\$141,706	\$8,389,896	\$8,615,372	-\$14,743,574
2013	12	Operation	-\$23,449,699	\$83,770	\$141,706	\$8,408,372	\$8,633,848	-\$14,815,851
2014	13	Operation	-\$23,540,451	\$83,770	\$141,706	\$8,426,848	\$8,652,324	-\$14,888,127
2015	14	Operation	-\$23,631,204	\$83,770	\$141,706	\$8,445,324	\$8,670,800	-\$14,960,404
2016	15	Operation	-\$23,721,956	\$83,770	\$141,706	\$8,463,800	\$8,689,276	-\$15,032,680
2017	16	Operation	-\$23,812,709	\$83,770	\$141,706	\$8,482,276	\$8,707,752	-\$15,104,956
2018	17	Operation	-\$23,903,461	\$167,540	\$21,184,554	\$8,500,752	\$29,852,846	\$5,949,385
2019	18	Operation	-\$23,994,214	\$83,770	\$141,706	\$8,519,228	\$8,744,704	-\$15,249,509
2020	19	Operation	-\$24,084,966	\$83,770	\$141,706	\$8,537,705	\$8,763,180	-\$15,321,786
2021	20	Operation	-\$24,175,719	\$83,770	\$141,706	\$8,556,181	\$8,781,656	-\$15,394,062
2022	21	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2023	22	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768

Table D-20 (Continued)
Present Value of Change in Regional Income Due to:
Combination 10: PCAs 10 and 2 - Terminal Large Scale Water Treatment Facility with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2025	24	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2026	25	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2027	26	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2028	27	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2029	28	Operation	-\$24,175,719	\$167,540	\$21,042,848	\$8,556,181	\$29,766,569	\$5,590,850
2030	29	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2031	30	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2032	31	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2033	32	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2034	33	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2035	34	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2036	35	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2037	36	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2038	37	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2039	38	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2040	39	Operation	-\$24,175,719	\$167,540	\$21,042,848	\$8,556,181	\$29,766,569	\$5,590,850
2041	40	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2042	41	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2043	42	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2044	43	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2045	44	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768

Table D-20 (Continued)
Present Value of Change in Regional Income Due to:
Combination 10: PCAs 10 and 2 - Terminal Large Scale Water Treatment Facility with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2046	45	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2047	46	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2048	47	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2049	48	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2050	49	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2051	50	Operation	-\$24,175,719	\$167,540	\$21,042,848	\$8,556,181	\$29,766,569	\$5,590,850
2052	51	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2053	52	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2054	53	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2055	54	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2056	55	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2057	56	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2058	57	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2059	58	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2060	59	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
2061	60	Operation	-\$24,175,719	\$83,770	\$0	\$8,556,181	\$8,639,951	-\$15,535,768
	Total Non-Discounted		-\$1,341,634,651	\$8,355,272	\$156,856,557	\$461,390,844	\$626,602,673	-\$715,031,979
	Present Value at 3.2% discount rate							-\$265,547,635

Table D-21
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 11: PCAs 10 and 3 - Terminal Large Scale Water Treatment Facility with
Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$847,583	\$0	\$0	\$847,583	0	0
2003	2	Planning and Research	\$847,583	\$0	\$0	\$847,583	0	0
2004	3	Planning and Research	\$847,583	\$0	\$0	\$847,583	0	0
2005	4	Design and Permitting	\$341,250	\$6,822,780	\$13,430,616	\$20,594,646	425,348	265,534
2006	5	Design and Permitting	\$341,250	\$6,822,780	\$13,436,862	\$20,600,892	426,540	266,229
2007	6	Design and Permitting	\$341,250	\$6,822,780	\$13,443,109	\$20,607,139	427,731	266,924
2008	7	Construction	\$409,500	\$42,087,520	\$13,449,356	\$55,946,376	428,922	267,620
2009	8	Construction	\$409,500	\$42,087,520	\$13,455,603	\$55,952,623	430,114	268,315
2010	9	Construction	\$409,500	\$42,087,520	\$13,461,849	\$55,958,869	431,305	269,010
2011	10	Operation	\$204,750	\$0	\$26,609,396	\$26,814,146	531,888	369,098
2012	11	Operation	\$204,750	\$0	\$26,615,643	\$26,820,393	533,080	369,793
2013	12	Operation	\$204,750	\$0	\$26,621,890	\$26,826,640	534,271	370,488
2014	13	Operation	\$204,750	\$0	\$26,628,137	\$26,832,887	535,462	371,183
2015	14	Operation	\$204,750	\$0	\$26,634,383	\$26,839,133	536,653	371,878
2016	15	Operation	\$204,750	\$0	\$26,640,630	\$26,845,380	537,845	372,574
2017	16	Operation	\$204,750	\$0	\$26,646,877	\$26,851,627	539,036	373,269
2018	17	Operation	\$204,750	\$0	\$26,653,124	\$26,857,874	540,227	373,964
2019	18	Operation	\$204,750	\$0	\$26,659,370	\$26,864,120	541,418	374,659
2020	19	Operation	\$204,750	\$0	\$26,665,617	\$26,870,367	542,610	375,354
2021	20	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2022	21	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2023	22	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2024	23	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050

Table D-21 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 11: PCAs 10 and 3 - Terminal Large Scale Water Treatment Facility with
Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2026	25	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2027	26	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2028	27	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2029	28	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2030	29	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2031	30	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2032	31	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2033	32	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2034	33	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2035	34	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2036	35	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2037	36	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2038	37	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2039	38	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2040	39	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2041	40	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2042	41	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2043	42	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2044	43	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2045	44	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2046	45	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2047	46	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050

Table D-21 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 11: PCAs 10 and 3 - Terminal Large Scale Water Treatment Facility with
Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 10 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2049	48	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2050	49	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2051	50	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2052	51	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2053	52	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2054	53	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2055	54	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2056	55	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2057	56	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2058	57	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2059	58	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2060	59	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
2061	60	Operation	\$204,750	\$0	\$26,671,864	\$26,876,614	543,801	376,050
	Total - Non-Discounted		\$15,237,250	\$146,730,900	\$1,440,598,884	\$1,602,567,034	30,238,287	20,743,925
	Present Value at 3.2% discount rate					\$691,158,085	12,284,431	8,358,084
	PV cost per pound of P removed						\$56.26	\$82.69
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						503,971	345,732

Table D-22
Present Value of Change in Regional Income Due to:
Combination 11: PCAs 10 and 3 - Terminal Large Scale Water Treatment Facility with
Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$0	\$432,007	\$0	\$0	\$432,007	\$432,007
2003	2	Planning and Research	\$0	\$432,007	\$0	\$0	\$432,007	\$432,007
2004	3	Planning and Research	\$0	\$432,007	\$0	\$0	\$432,007	\$432,007
2005	4	Design and Permitting	\$0	\$209,422	\$1,609,715	\$635,871	\$2,455,008	\$2,455,008
2006	5	Design and Permitting	\$0	\$209,422	\$1,609,715	\$643,081	\$2,462,218	\$2,462,218
2007	6	Design and Permitting	\$0	\$209,422	\$1,609,715	\$650,292	\$2,469,429	\$2,469,429
2008	7	Construction	-\$142,782	\$251,307	\$8,950,051	\$657,502	\$9,858,860	\$9,716,078
2009	8	Construction	-\$285,564	\$251,307	\$8,950,051	\$664,713	\$9,866,070	\$9,580,507
2010	9	Construction	-\$428,346	\$251,307	\$8,950,051	\$671,923	\$9,873,281	\$9,444,935
2011	10	Operation	-\$428,346	\$125,652	\$0	\$3,210,108	\$3,335,760	\$2,907,414
2012	11	Operation	-\$428,346	\$125,652	\$0	\$3,217,318	\$3,342,970	\$2,914,625
2013	12	Operation	-\$428,346	\$125,652	\$0	\$3,224,529	\$3,350,181	\$2,921,835
2014	13	Operation	-\$428,346	\$125,652	\$0	\$3,231,739	\$3,357,391	\$2,929,046
2015	14	Operation	-\$428,346	\$125,652	\$0	\$3,238,950	\$3,364,602	\$2,936,256
2016	15	Operation	-\$428,346	\$125,652	\$0	\$3,246,160	\$3,371,812	\$2,943,467
2017	16	Operation	-\$428,346	\$125,652	\$0	\$3,253,371	\$3,379,023	\$2,950,677
2018	17	Operation	-\$428,346	\$125,652	\$0	\$3,260,581	\$3,386,233	\$2,957,888
2019	18	Operation	-\$428,346	\$125,652	\$0	\$3,267,792	\$3,393,444	\$2,965,098
2020	19	Operation	-\$428,346	\$125,652	\$0	\$3,275,002	\$3,400,654	\$2,972,309
2021	20	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2022	21	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2023	22	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2024	23	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2025	24	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519

Table D-22 (Continued)
Present Value of Change in Regional Income Due to:
Combination 11: PCAs 10 and 3 - Terminal Large Scale Water Treatment Facility with
Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2026	25	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2027	26	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2028	27	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2029	28	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2030	29	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2031	30	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2032	31	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2033	32	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2034	33	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2035	34	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2036	35	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2037	36	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2038	37	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2039	38	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2040	39	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2041	40	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2042	41	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2043	42	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2044	43	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2045	44	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2046	45	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2047	46	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2048	47	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2049	48	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519

Table D-22 (Continued)
Present Value of Change in Regional Income Due to:
Combination 11: PCAs 10 and 3 - Terminal Large Scale Water Treatment Facility with
Non-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2050	49	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2051	50	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2052	51	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2053	52	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2054	53	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2055	54	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2056	55	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2057	56	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2058	57	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2059	58	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2060	59	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
2061	60	Operation	-\$428,346	\$125,652	\$0	\$3,282,212	\$3,407,865	\$2,979,519
	Total Non-Discounted		-\$22,702,314	\$9,086,465	\$31,679,297	\$170,919,642	\$211,685,404	\$188,983,090
	Present Value at 3.2% discount rate							\$85,677,207

Table D-23
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 12: PCAs 10 and 6 - Terminal Large Scale Water Treatment Facility with
Alternative Land Uses

Tracking Year	Year	PCA 10 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Reduction in Land Value	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$847,583	\$0	\$0	\$0	\$847,583	0	0
2003	2	Planning and Research	\$847,583	\$0	\$0	\$0	\$847,583	0	0
2004	3	Planning and Research	\$847,583	\$0	\$0	\$0	\$847,583	0	0
2005	4	Design and Permitting	\$614,250	\$6,822,780	\$0	\$0	\$7,437,030	0	0
2006	5	Design and Permitting	\$1,023,750	\$19,150,862	\$69,439,739	\$0	\$89,614,351	0	0
2007	6	Design and Permitting	\$1,023,750	\$19,177,234	\$69,439,739	\$0	\$89,640,723	13,384	8,165
2008	7	Construction	\$1,092,000	\$54,468,346	\$69,439,739	\$0	\$125,000,085	27,091	16,532
2009	8	Construction	\$1,092,000	\$54,494,718	\$69,439,739	\$0	\$125,026,457	41,121	25,099
2010	9	Construction	\$1,092,000	\$54,521,090	\$69,439,739	\$0	\$125,052,829	55,473	33,868
2011	10	Operation	\$887,250	\$12,459,942	\$69,439,739	\$13,141,300	\$95,928,231	199,175	171,864
2012	11	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	218,078	183,388
2013	12	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	221,665	185,590
2014	13	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	225,309	187,828
2015	14	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	229,011	190,102
2016	15	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	232,770	192,412
2017	16	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	236,586	194,757
2018	17	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	240,460	197,138
2019	18	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	244,391	199,555
2020	19	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	248,379	202,007
2021	20	Operation	\$204,750	\$0	\$2,362,851	\$13,141,300	\$15,708,901	252,425	204,496
2022	21	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	255,244	206,220
2023	22	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	258,062	207,944

Table D-23 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 12: PCAs 10 and 6 - Terminal Large Scale Water Treatment Facility with
Alternative Land Uses

Tracking Year	Year	PCA 10 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Reduction in Land Value	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2024	23	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	260,881	209,667
2025	24	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	263,700	211,391
2026	25	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	266,519	213,115
2027	26	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	269,337	214,839
2028	27	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	272,156	216,563
2029	28	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	274,975	218,287
2030	29	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2031	30	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2032	31	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2033	32	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2034	33	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2035	34	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2036	35	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2037	36	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2038	37	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2039	38	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2040	39	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2041	40	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2042	41	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2043	42	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2044	43	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2045	44	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011

Table D-23 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 12: PCAs 10 and 6 - Terminal Large Scale Water Treatment Facility with
Alternative Land Uses

Tracking Year	Year	PCA 10 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Reduction in Land Value	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2046	45	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2047	46	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2048	47	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2049	48	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2050	49	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2051	50	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2052	51	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2053	52	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2054	53	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2055	54	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2056	55	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2057	56	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2058	57	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2059	58	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2060	59	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
2061	60	Operation	\$204,750	\$0	\$0	\$13,141,300	\$13,346,050	277,794	220,011
	Total - Non-Discounted		\$19,605,250	\$221,094,974		\$670,206,300	\$1,351,173,465	13,695,587	10,931,182
	Present Value at 3.2% discount rate						\$777,261,500	4,956,634	3,973,795
	PV cost per pound of P removed							\$156.81	\$195.60
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							228,260	182,186

Table D-24
Present Value of Change in Regional Income Due to:
Combination 12: PCAs 10 and 6 - Terminal Large Scale Water Treatment Facility with Alternative Land Uses

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	Planning and Research	\$0	\$432,016	\$0	\$0	\$432,016	\$432,016
2003	2	Planning and Research	\$0	\$432,016	\$0	\$0	\$432,016	\$432,016
2004	3	Planning and Research	\$0	\$432,016	\$0	\$0	\$432,016	\$432,016
2005	4	Design and Permitting	\$0	\$376,965	\$1,609,715	\$0	\$1,986,680	\$1,986,680
2006	5	Design and Permitting	-\$234,318,405	\$628,275	\$1,609,715	\$0	\$2,237,990	-\$232,080,415
2007	6	Design and Permitting	-\$237,097,649	\$628,275	\$1,609,715	\$0	\$2,237,990	-\$234,859,659
2008	7	Construction	-\$240,038,615	\$670,160	\$8,950,051	\$0	\$9,620,211	-\$230,418,404
2009	8	Construction	-\$242,998,521	\$670,160	\$8,950,051	\$0	\$9,620,211	-\$233,378,310
2010	9	Construction	-\$245,977,367	\$670,160	\$8,950,051	\$0	\$9,620,211	-\$236,357,156
2011	10	Operation	-\$248,832,370	\$544,505	\$0	\$2,530,974	\$3,075,480	-\$245,756,891
2012	11	Operation	-\$250,513,446	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$247,856,817
2013	12	Operation	-\$252,194,521	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$249,537,892
2014	13	Operation	-\$253,875,597	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$251,218,968
2015	14	Operation	-\$255,556,672	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$252,900,043
2016	15	Operation	-\$257,237,748	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$254,581,119
2017	16	Operation	-\$258,918,823	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$256,262,194
2018	17	Operation	-\$260,599,899	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$257,943,270
2019	18	Operation	-\$262,280,974	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$259,624,345
2020	19	Operation	-\$263,962,050	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$261,305,421
2021	20	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2022	21	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2023	22	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2024	23	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2025	24	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496

Table D-24 (Continued)
Present Value of Change in Regional Income Due to:
Combination 12: PCAs 10 and 6 - Terminal Large Scale Water Treatment Facility with Alternative Land Uses

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2026	25	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2027	26	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2028	27	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2029	28	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2030	29	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2031	30	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2032	31	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2033	32	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2034	33	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2035	34	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2036	35	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2037	36	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2038	37	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2039	38	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2040	39	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2041	40	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2042	41	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2043	42	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2044	43	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2045	44	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2046	45	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2047	46	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2048	47	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2049	48	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496

Table D-24 (Continued)
Present Value of Change in Regional Income Due to:
Combination 12: PCAs 10 and 6 - Terminal Large Scale Water Treatment Facility with Alternative Land Uses

Tracking Year	Year	PCA 10 Activity	From Conversion of Land	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2050	49	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2051	50	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2052	51	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2053	52	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2054	53	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2055	54	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2056	55	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2057	56	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2058	57	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2059	58	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2060	59	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
2061	60	Operation	-\$265,643,125	\$125,655	\$0	\$2,530,974	\$2,656,629	-\$262,986,496
	Total Non-Discounted		-\$14,655,770,802	\$11,767,305	\$31,679,297	\$129,079,688	\$172,526,289	-\$14,483,244,513
	Present Value at 3.2% discount rate							-\$5,820,056,184

Table D-25
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 13: PCAs 9 and 11 - Tributary Sediment Removal and Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Change in Land Value	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2002	1	No Action	\$427,350	\$0	\$0	\$0	\$427,350	0	0
2003	2	No Action	\$427,350	\$0	\$0	\$0	\$427,350	0	0
2004	3	No Action	\$427,350	\$0	\$0	\$0	\$427,350	0	0
2005	4	No Action	\$361,111	\$0	\$56,000,000	\$1,144,351	\$57,505,462	0	0
2006	5	Planning and Design	\$790,472	\$73,256	\$56,000,000	\$2,288,702	\$59,152,431	73,029	44,177
2007	6	Design and Real Estate Purchases	\$1,117,458	\$472,219	\$56,000,000	\$3,433,053	\$61,022,731	146,058	88,353
2008	7	Design and Real Estate Purchases	\$1,117,458	\$574,294	\$0	\$3,433,053	\$5,124,806	219,086	132,530
2009	8	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	219,086	132,530
2010	9	Sediment Removal Operations	\$1,117,458	\$950,721	\$0	\$3,433,053	\$5,501,233	219,086	132,530
2011	10	Sediment Removal Operations	\$1,117,458	\$1,047,088	\$0	\$3,433,053	\$5,597,600	219,086	132,530
2012	11	Sediment Removal Operations	\$1,117,458	\$1,047,088	\$0	\$3,433,053	\$5,597,600	219,086	132,530
2013	12	Sediment Removal Operations	\$1,117,458	\$535,333	\$0	\$3,433,053	\$5,085,845	219,086	132,530
2014	13	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2015	14	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2016	15	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2017	16	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2018	17	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2019	18	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810

Table D-25 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 13: PCAs 9 and 11 - Tributary Sediment Removal and Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Change in Land Value	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2020	19	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2021	20	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2022	21	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2023	22	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2024	23	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2025	24	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2026	25	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2027	26	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2028	27	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2029	28	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2030	29	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2031	30	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2032	31	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2033	32	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2034	33	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2035	34	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2036	35	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2037	36	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2038	37	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2039	38	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2040	39	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2041	40	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2042	41	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810

Table D-25 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 13: PCAs 9 and 11 - Tributary Sediment Removal and Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Change in Land Value	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2043	42	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2044	43	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2045	44	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2046	45	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2047	46	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2048	47	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2049	48	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2050	49	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2051	50	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2052	51	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2053	52	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2054	53	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2055	54	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2056	55	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2057	56	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2058	57	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2059	58	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2060	59	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
2061	60	No Action	\$1,083,333	\$0	\$0	\$3,433,053	\$4,516,387	254,366	167,810
	Total - Non-Discounted		\$62,221,718	\$4,700,000		\$192,250,994	\$427,172,712	13,743,190	8,982,574
	Present Value at 3.2% discount rate						\$259,256,483	5,578,225	3,614,491
	PV cost per pound of P removed							\$46.48	\$71.73
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							229,053	149,710

Table D-26
Present Value of Change in Regional Income Due to:
Combination 13: PCAs 9 and 11 - Tributary Sediment Removal with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 9 Activity	From Conversion of Land and Change in Cattle Sales	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$0	\$458,077	\$0	\$0	\$458,077	\$458,077
2003	2	No Action	\$0	\$458,077	\$0	\$0	\$458,077	\$458,077
2004	3	No Action	\$0	\$458,077	\$0	\$0	\$458,077	\$458,077
2005	4	No Action	\$0	\$387,075	\$5,045,068	\$416,495	\$5,848,638	\$5,848,638
2006	5	Planning and Design	-\$1,783,169	\$815,914	\$5,045,068	\$832,990	\$6,693,972	\$4,910,803
2007	6	Design and Real Estate Purchases	-\$3,583,800	\$1,182,107	\$5,070,919	\$1,249,484	\$7,502,510	\$3,918,709
2008	7	Design and Real Estate Purchases	-\$5,371,437	\$1,182,107	\$25,850	\$1,249,484	\$2,457,441	-\$2,913,996
2009	8	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2010	9	Sediment Removal Operations	-\$5,371,437	\$1,182,107	\$267,279	\$1,249,484	\$2,698,870	-\$2,672,567
2011	10	Sediment Removal Operations	-\$5,371,437	\$1,182,107	\$294,370	\$1,249,484	\$2,725,962	-\$2,645,475
2012	11	Sediment Removal Operations	-\$5,371,437	\$1,182,107	\$294,370	\$1,249,484	\$2,725,962	-\$2,645,475
2013	12	Sediment Removal Operations	-\$5,371,437	\$1,182,107	\$150,499	\$1,249,484	\$2,582,090	-\$2,789,347
2014	13	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2015	14	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2016	15	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2017	16	No Action	-\$5,371,437	\$1,161,225	\$626,140	\$1,249,484	\$3,036,850	-\$2,334,587
2018	17	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2019	18	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2020	19	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2021	20	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2022	21	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2023	22	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2024	23	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728

Table D-26 (Continued)
Present Value of Change in Regional Income Due to:
Combination 13: PCAs 9 and 11 - Tributary Sediment Removal with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 9 Activity	From Conversion of Land and Change in Cattle Sales	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2026	25	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2027	26	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2028	27	No Action	-\$5,371,437	\$1,161,225	\$5,486,254	\$1,249,484	\$7,896,963	\$2,525,526
2029	28	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2030	29	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2031	30	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2032	31	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2033	32	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2034	33	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2035	34	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2036	35	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2037	36	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2038	37	No Action	-\$5,371,437	\$1,161,225	\$626,140	\$1,249,484	\$3,036,850	-\$2,334,587
2039	38	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2040	39	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2041	40	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2042	41	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2043	42	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2044	43	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2045	44	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2046	45	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2047	46	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728

Table D-26 (Continued)
Present Value of Change in Regional Income Due to:
Combination 13: PCAs 9 and 11 - Tributary Sediment Removal with Isolated Wetlands Restoration on Pastureland

Tracking Year	Year	PCA 9 Activity	From Conversion of Land and Change in Cattle Sales	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	No Action	-\$5,371,437	\$1,161,225	\$5,486,254	\$1,249,484	\$7,896,963	\$2,525,526
2049	48	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2050	49	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2051	50	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2052	51	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2053	52	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2054	53	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2055	54	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2056	55	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2057	56	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2058	57	No Action	-\$5,371,437	\$1,161,225	\$626,140	\$1,249,484	\$3,036,850	-\$2,334,587
2059	58	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2060	59	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
2061	60	No Action	-\$5,371,437	\$1,161,225	\$0	\$1,249,484	\$2,410,709	-\$2,960,728
	Total Non-Discounted		-\$295,424,569	\$66,569,885	\$29,044,353	\$69,971,121	\$165,585,359	-\$129,839,209
	Present Value at 3.2% discount rate							-\$43,630,302

Table D-27
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 14: PCAs 9, 4 and 5 - Tributary Sediment Removal with
Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2002	1	No Action	\$924,447	\$0	\$0	\$0	\$924,447	0	0
2003	2	No Action	\$924,447	\$0	\$0	\$0	\$924,447	0	0
2004	3	No Action	\$924,447	\$0	\$0	\$0	\$924,447	0	0
2005	4	No Action	\$455,000	\$18,304,405	\$2,654,033	\$760,000	\$22,173,438	138,673	81,680
2006	5	Planning and Design	\$523,250	\$18,339,693	\$5,289,375	\$1,520,000	\$25,672,318	276,245	162,710
2007	6	Design and Real Estate Purchases	\$489,125	\$18,700,686	\$7,906,028	\$2,280,000	\$29,375,839	412,714	243,092
2008	7	Design and Real Estate Purchases	\$129,675	\$574,294	\$7,877,993	\$3,040,000	\$11,621,962	422,324	248,752
2009	8	No Action	\$95,550	\$0	\$7,849,958	\$3,040,000	\$10,985,508	422,005	248,564
2010	9	Sediment Removal Operations	\$129,675	\$950,721	\$7,821,923	\$3,040,000	\$11,942,320	421,686	248,376
2011	10	Sediment Removal Operations	\$129,675	\$1,047,088	\$7,793,888	\$3,040,000	\$12,010,652	421,367	248,188
2012	11	Sediment Removal Operations	\$129,675	\$1,047,088	\$7,765,853	\$3,040,000	\$11,982,617	421,048	248,000
2013	12	Sediment Removal Operations	\$129,675	\$535,333	\$7,737,818	\$3,040,000	\$11,442,826	420,729	247,813
2014	13	No Action	\$95,550	\$0	\$7,709,784	\$3,040,000	\$10,845,334	455,690	282,905
2015	14	No Action	\$95,550	\$0	\$7,681,749	\$3,040,000	\$10,817,299	455,371	282,717
2016	15	No Action	\$95,550	\$0	\$7,653,714	\$3,040,000	\$10,789,264	455,052	282,529
2017	16	No Action	\$95,550	\$0	\$7,625,679	\$3,040,000	\$10,761,229	454,733	282,341
2018	17	No Action	\$109,200	\$22,563,000	\$7,597,644	\$3,040,000	\$33,309,844	454,414	282,153
2019	18	No Action	\$436,800	\$10,251,841	\$7,569,609	\$3,040,000	\$21,298,250	454,095	281,965
2020	19	No Action	\$436,800	\$10,213,872	\$7,541,574	\$3,040,000	\$21,232,246	453,776	281,777
2021	20	No Action	\$436,800	\$10,175,903	\$7,513,539	\$3,040,000	\$21,166,242	453,457	281,589
2022	21	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	454,791	282,375

Table D-27 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 14: PCAs 9, 4 and 5 - Tributary Sediment Removal with
Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2023	22	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	456,125	283,161
2024	23	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	457,458	283,946
2025	24	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	458,792	284,732
2026	25	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	460,126	285,517
2027	26	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2028	27	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2029	28	No Action	\$109,200	\$22,563,000	\$7,513,539	\$3,040,000	\$33,225,739	461,460	286,303
2030	29	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2031	30	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2032	31	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2033	32	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2034	33	No Action	\$436,800	\$10,175,903	\$7,513,539	\$3,040,000	\$21,166,242	461,460	286,303
2035	34	No Action	\$436,800	\$10,175,903	\$7,513,539	\$3,040,000	\$21,166,242	461,460	286,303
2036	35	No Action	\$436,800	\$10,175,903	\$7,513,539	\$3,040,000	\$21,166,242	461,460	286,303
2037	36	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2038	37	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2039	38	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2040	39	No Action	\$109,200	\$22,563,000	\$7,513,539	\$3,040,000	\$33,225,739	461,460	286,303
2041	40	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2042	41	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2043	42	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303

Table D-27 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 14: PCAs 9, 4 and 5 - Tributary Sediment Removal with
Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost and Change in Net Revenue	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)
2044	43	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2045	44	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2046	45	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2047	46	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2048	47	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2049	48	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2050	49	No Action	\$436,800	\$10,175,903	\$7,513,539	\$3,040,000	\$21,166,242	461,460	286,303
2051	50	No Action	\$450,450	\$32,738,903	\$7,513,539	\$3,040,000	\$43,742,892	461,460	286,303
2052	51	No Action	\$436,800	\$10,175,903	\$7,513,539	\$3,040,000	\$21,166,242	461,460	286,303
2053	52	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2054	53	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2055	54	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2056	55	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2057	56	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2058	57	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2059	58	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2060	59	No Action	\$95,550	\$0	\$7,513,539	\$3,040,000	\$10,649,089	461,460	286,303
2061	60	No Action	\$95,550	-\$10,175,903	\$7,513,539	\$3,040,000	\$473,186	461,460	286,303
	Total - Non-Discounted		\$12,696,891	\$231,272,442		\$168,720,000	\$836,821,056	25,431,765	15,675,487
	Present Value at 3.2% discount rate						\$376,432,516	10,565,814	6,473,124
	PV cost per pound of P removed							\$35.63	\$58.15
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							423,863	261,258

Table D-28
Present Value of Change in Regional Income Due to:
Combination 14: PCAs 9, 4 and 5 - Tributary Sediment Removal with
Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 9 Activity	From Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$0	\$567,327	\$0	\$0	\$567,327	\$567,327
2003	2	No Action	\$0	\$567,327	\$0	\$0	\$567,327	\$567,327
2004	3	No Action	\$0	\$567,327	\$0	\$0	\$567,327	\$567,327
2005	4	No Action	-\$972,979	\$279,224	\$9,929,857	\$1,192,404	\$11,401,486	\$10,428,507
2006	5	Planning and Design	-\$1,939,106	\$320,988	\$9,904,920	\$2,379,185	\$12,605,094	\$10,665,988
2007	6	Design and Real Estate Purchases	-\$2,915,844	\$300,106	\$9,905,834	\$3,560,344	\$13,766,284	\$10,850,440
2008	7	Design and Real Estate Purchases	-\$908,243	\$79,519	\$25,850	\$3,945,891	\$4,051,260	\$3,143,017
2009	8	No Action	-\$897,966	\$58,638	\$0	\$3,937,457	\$3,996,094	\$3,098,129
2010	9	Sediment Removal Operations	-\$887,688	\$79,519	\$267,279	\$3,929,023	\$4,275,821	\$3,388,133
2011	10	Sediment Removal Operations	-\$877,410	\$79,519	\$294,370	\$3,920,589	\$4,294,479	\$3,417,069
2012	11	Sediment Removal Operations	-\$867,132	\$79,519	\$294,370	\$3,912,155	\$4,286,045	\$3,418,913
2013	12	Sediment Removal Operations	-\$856,855	\$79,519	\$150,499	\$3,903,721	\$4,133,740	\$3,276,885
2014	13	No Action	-\$846,577	\$58,638	\$0	\$3,895,287	\$3,953,925	\$3,107,348
2015	14	No Action	-\$836,299	\$58,638	\$0	\$3,886,854	\$3,945,491	\$3,109,192
2016	15	No Action	-\$826,022	\$58,638	\$0	\$3,878,420	\$3,937,057	\$3,111,036
2017	16	No Action	-\$815,744	\$58,638	\$0	\$3,869,986	\$3,928,623	\$3,112,880
2018	17	No Action	-\$805,466	\$67,015	\$8,542,911	\$3,861,552	\$12,471,478	\$11,666,012
2019	18	No Action	-\$795,188	\$268,055	\$6,733,104	\$3,853,118	\$10,854,278	\$10,059,089
2020	19	No Action	-\$784,911	\$268,055	\$6,708,168	\$3,844,684	\$10,820,907	\$10,035,996
2021	20	No Action	-\$774,633	\$268,055	\$6,683,231	\$3,836,250	\$10,787,536	\$10,012,903

Table D-28 (Continued)
Present Value of Change in Regional Income Due to:
Combination 14: PCAs 9, 4 and 5 - Tributary Sediment Removal with
Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 9 Activity	From Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2022	21	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2023	22	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2024	23	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2025	24	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2026	25	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2027	26	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2028	27	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2029	28	No Action	-\$774,633	\$67,015	\$8,542,911	\$3,836,250	\$12,446,176	\$11,671,543
2030	29	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2031	30	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2032	31	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2033	32	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2034	33	No Action	-\$774,633	\$268,055	\$6,683,231	\$3,836,250	\$10,787,536	\$10,012,903
2035	34	No Action	-\$774,633	\$268,055	\$6,683,231	\$3,836,250	\$10,787,536	\$10,012,903
2036	35	No Action	-\$774,633	\$268,055	\$6,683,231	\$3,836,250	\$10,787,536	\$10,012,903
2037	36	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2038	37	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2039	38	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2040	39	No Action	-\$774,633	\$67,015	\$8,542,911	\$3,836,250	\$12,446,176	\$11,671,543
2041	40	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2042	41	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2043	42	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255

Table D-28 (Continued)
Present Value of Change in Regional Income Due to:
Combination 14: PCAs 9, 4 and 5 - Tributary Sediment Removal with
Dairy Farm Optimization and Enhanced Cow-Calf BMPs

Tracking Year	Year	PCA 9 Activity	From Increased Milk Production and Land Conversion	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2044	43	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2045	44	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2046	45	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2047	46	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2048	47	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2049	48	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2050	49	No Action	-\$774,633	\$268,055	\$6,683,231	\$3,836,250	\$10,787,536	\$10,012,903
2051	50	No Action	-\$774,633	\$276,432	\$15,226,142	\$3,836,250	\$19,338,824	\$18,564,191
2052	51	No Action	-\$774,633	\$268,055	\$6,683,231	\$3,836,250	\$10,787,536	\$10,012,903
2053	52	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2054	53	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2055	54	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2056	55	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2057	56	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2058	57	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2059	58	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2060	59	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
2061	60	No Action	-\$774,633	\$58,638	\$0	\$3,836,250	\$3,894,888	\$3,120,255
	Total Non-Discounted		-\$48,593,380	\$7,791,402	\$125,168,512	\$215,056,938	\$348,016,852	\$299,423,472
	Present Value at 3.2% discount rate							\$131,177,850

Table D-29
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 15: PCAs 9 and 1 - Tributary Sediment Removal with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$1,107,909	\$0	\$0	\$1,107,909	0	0
2003	2	No Action	\$1,107,909	\$0	\$0	\$1,107,909	0	0
2004	3	No Action	\$1,107,909	\$0	\$0	\$1,107,909	0	0
2005	4	No Action	\$273,000	\$41,356,801	\$7,823,713	\$49,453,513	97,006	59,992
2006	5	Planning and Design	\$341,250	\$40,237,675	\$15,662,255	\$56,241,180	194,301	120,153
2007	6	Design and Real Estate Purchases	\$307,125	\$40,636,638	\$23,515,626	\$64,459,389	291,886	180,482
2008	7	Design and Real Estate Purchases	\$102,375	\$971,754	\$31,383,827	\$32,457,956	389,761	240,979
2009	8	No Action	\$68,250	\$397,461	\$31,413,485	\$31,879,196	390,340	241,316
2010	9	Sediment Removal Operations	\$102,375	\$1,348,182	\$31,443,144	\$32,893,701	390,919	241,653
2011	10	Sediment Removal Operations	\$102,375	\$1,444,549	\$31,472,803	\$33,019,727	391,498	241,989
2012	11	Sediment Removal Operations	\$102,375	\$1,444,549	\$31,502,462	\$33,049,386	392,078	242,326
2013	12	Sediment Removal Operations	\$102,375	\$932,793	\$31,532,121	\$32,567,289	392,657	242,663
2014	13	No Action	\$68,250	\$397,461	\$31,561,779	\$32,027,490	428,516	278,280
2015	14	No Action	\$68,250	\$397,461	\$31,591,438	\$32,057,149	429,095	278,617
2016	15	No Action	\$68,250	\$397,461	\$31,621,097	\$32,086,808	429,675	278,953
2017	16	No Action	\$68,250	\$397,461	\$31,650,756	\$32,116,467	430,254	279,290
2018	17	No Action	\$204,750	\$83,792,721	\$31,680,415	\$115,677,886	430,833	279,627
2019	18	No Action	\$68,250	\$397,461	\$31,710,073	\$32,175,784	431,412	279,964
2020	19	No Action	\$68,250	\$397,461	\$31,739,732	\$32,205,443	431,991	280,301
2021	20	No Action	\$68,250	\$397,461	\$31,769,391	\$32,235,102	432,571	280,637
2022	21	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2023	22	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2024	23	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637

Table D-29 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 15: PCAs 9 and 1 - Tributary Sediment Removal with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2026	25	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2027	26	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2028	27	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2029	28	No Action	\$204,750	\$83,395,261	\$31,769,391	\$115,369,402	432,571	280,637
2030	29	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2031	30	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2032	31	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2033	32	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2034	33	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2035	34	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2036	35	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2037	36	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2038	37	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2039	38	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2040	39	No Action	\$204,750	\$83,395,261	\$31,769,391	\$115,369,402	432,571	280,637
2041	40	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2042	41	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2043	42	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2044	43	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2045	44	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2046	45	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2047	46	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637

Table D-29 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 15: PCAs 9 and 1 - Tributary Sediment Removal with Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2049	48	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2050	49	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2051	50	No Action	\$204,750	\$83,395,261	\$31,769,391	\$115,369,402	432,571	280,637
2052	51	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2053	52	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2054	53	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2055	54	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2056	55	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2057	56	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2058	57	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2059	58	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2060	59	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
2061	60	No Action	\$68,250	\$0	\$31,769,391	\$31,837,641	432,571	280,637
	Total - Non-Discounted		\$8,647,227	\$465,531,130	\$1,759,849,760	\$2,234,028,117	23,677,618	15,272,718
	Present Value at 3.2% discount rate					\$980,890,252	9,748,431	6,254,621
	PV cost per pound of P removed						\$100.62	\$156.83
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						394,627	254,545

Table D-30
Present Value of Change in Regional Income Due to:
Combination 15: PCAs 9 and 1 - Tributary Sediment Removal with
Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$0	\$679,924	\$0	\$0	\$679,924	\$679,924
2003	2	No Action	\$0	\$679,924	\$0	\$0	\$679,924	\$679,924
2004	3	No Action	\$0	\$679,924	\$0	\$0	\$679,924	\$679,924
2005	4	No Action	-\$7,283,373	\$167,540	\$10,072,935	\$2,893,521	\$13,133,996	\$5,850,623
2006	5	Planning and Design	-\$14,630,098	\$209,304	\$9,782,516	\$5,792,526	\$15,784,346	\$1,154,249
2007	6	Design and Real Estate Purchases	-\$22,057,638	\$188,422	\$9,808,366	\$8,697,016	\$18,693,804	-\$3,363,834
2008	7	Design and Real Estate Purchases	-\$22,157,135	\$62,767	\$122,656	\$11,606,990	\$11,792,413	-\$10,364,721
2009	8	No Action	-\$22,252,163	\$41,885	\$96,806	\$11,617,959	\$11,756,650	-\$10,495,513
2010	9	Sediment Removal Operations	-\$22,347,192	\$62,767	\$364,085	\$11,628,928	\$12,055,780	-\$10,291,412
2011	10	Sediment Removal Operations	-\$22,442,221	\$62,767	\$391,177	\$11,639,897	\$12,093,841	-\$10,348,380
2012	11	Sediment Removal Operations	-\$22,537,250	\$62,767	\$391,177	\$11,650,866	\$12,104,810	-\$10,432,440
2013	12	Sediment Removal Operations	-\$22,632,278	\$62,767	\$247,306	\$11,661,835	\$11,971,908	-\$10,660,371
2014	13	No Action	-\$22,727,307	\$41,885	\$96,806	\$11,672,804	\$11,811,495	-\$10,915,811
2015	14	No Action	-\$22,822,336	\$41,885	\$96,806	\$11,683,773	\$11,822,465	-\$10,999,871
2016	15	No Action	-\$22,917,364	\$41,885	\$96,806	\$11,694,742	\$11,833,434	-\$11,083,931
2017	16	No Action	-\$23,012,393	\$41,885	\$96,806	\$11,705,711	\$11,844,403	-\$11,167,990
2018	17	No Action	-\$23,107,422	\$125,655	\$20,408,702	\$11,716,680	\$32,251,038	\$9,143,616
2019	18	No Action	-\$23,202,450	\$41,885	\$96,806	\$11,727,649	\$11,866,341	-\$11,336,110
2020	19	No Action	-\$23,297,479	\$41,885	\$96,806	\$11,738,618	\$11,877,310	-\$11,420,169
2021	20	No Action	-\$23,392,508	\$41,885	\$96,806	\$11,749,587	\$11,888,279	-\$11,504,229
2022	21	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2023	22	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2024	23	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035

Table D-30 (Continued)
Present Value of Change in Regional Income Due to:
Combination 15: PCAs 9 and 1 - Tributary Sediment Removal with
Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2026	25	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2027	26	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2028	27	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2029	28	No Action	-\$23,392,508	\$125,655	\$20,311,896	\$11,749,587	\$32,187,138	\$8,794,631
2030	29	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2031	30	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2032	31	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2033	32	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2034	33	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2035	34	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2036	35	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2037	36	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2038	37	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2039	38	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2040	39	No Action	-\$23,392,508	\$125,655	\$20,311,896	\$11,749,587	\$32,187,138	\$8,794,631
2041	40	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2042	41	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2043	42	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2044	43	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2045	44	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2046	45	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2047	46	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035

Table D-30 (Continued)
Present Value of Change in Regional Income Due to:
Combination 15: PCAs 9 and 1 - Tributary Sediment Removal with
Chemical Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2049	48	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2050	49	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2051	50	No Action	-\$23,392,508	\$125,655	\$20,311,896	\$11,749,587	\$32,187,138	\$8,794,631
2052	51	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2053	52	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2054	53	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2055	54	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2056	55	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2057	56	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2058	57	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2059	58	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2060	59	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
2061	60	No Action	-\$23,392,508	\$41,885	\$0	\$11,749,587	\$11,791,472	-\$11,601,035
	Total Non-Discounted		-\$1,298,518,911	\$5,306,317	\$113,299,058	\$650,862,598	\$769,467,974	-\$529,050,938
	Present Value at 3.2% discount rate							-\$202,324,126

Table D-31
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 16: PCAs 9 and 2 - Tributary Sediment Removal with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$922,242	\$0	\$0	\$922,242	0	0
2003	2	No Action	\$922,242	\$0	\$0	\$922,242	0	0
2004	3	No Action	\$922,242	\$0	\$0	\$922,242	0	0
2005	4	No Action	\$273,000	\$36,705,018	\$2,763,136	\$39,741,154	68,348	40,921
2006	5	Planning and Design	\$341,250	\$35,604,228	\$5,544,093	\$41,489,571	136,952	81,994
2007	6	Design and Real Estate Purchases	\$307,125	\$36,003,191	\$8,342,870	\$44,653,186	205,813	123,218
2008	7	Design and Real Estate Purchases	\$102,375	\$965,642	\$11,159,468	\$12,227,485	274,929	164,593
2009	8	No Action	\$68,250	\$391,349	\$11,195,109	\$11,654,708	275,440	164,896
2010	9	Sediment Removal Operations	\$102,375	\$1,342,070	\$11,230,750	\$12,675,195	275,952	165,199
2011	10	Sediment Removal Operations	\$102,375	\$1,438,437	\$11,266,391	\$12,807,203	276,464	165,502
2012	11	Sediment Removal Operations	\$102,375	\$1,438,437	\$11,302,032	\$12,842,844	276,976	165,804
2013	12	Sediment Removal Operations	\$102,375	\$926,681	\$11,337,673	\$12,366,729	277,488	166,107
2014	13	No Action	\$68,250	\$391,349	\$11,373,314	\$11,832,912	313,279	201,690
2015	14	No Action	\$68,250	\$391,349	\$11,408,954	\$11,868,553	313,791	201,993
2016	15	No Action	\$68,250	\$391,349	\$11,444,595	\$11,904,194	314,303	202,296
2017	16	No Action	\$68,250	\$391,349	\$11,480,236	\$11,939,835	314,815	202,598
2018	17	No Action	\$204,750	\$58,505,348	\$11,515,877	\$70,225,975	315,327	202,901
2019	18	No Action	\$68,250	\$391,349	\$11,551,518	\$12,011,117	315,839	203,204
2020	19	No Action	\$68,250	\$391,349	\$11,587,159	\$12,046,758	316,350	203,507
2021	20	No Action	\$68,250	\$391,349	\$11,622,800	\$12,082,399	316,862	203,810
2022	21	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2023	22	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810

Table D-31 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 16: PCAs 9 and 2 - Tributary Sediment Removal with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2025	24	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2026	25	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2027	26	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2028	27	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2029	28	No Action	\$204,750	\$58,114,000	\$11,622,800	\$69,941,550	316,862	203,810
2030	29	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2031	30	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2032	31	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2033	32	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2034	33	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2035	34	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2036	35	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2037	36	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2038	37	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2039	38	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2040	39	No Action	\$204,750	\$58,114,000	\$11,622,800	\$69,941,550	316,862	203,810
2041	40	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2042	41	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2043	42	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2044	43	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2045	44	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810

Table D-31 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 16: PCAs 9 and 2 - Tributary Sediment Removal with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2046	45	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2047	46	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2048	47	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2049	48	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2050	49	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2051	50	No Action	\$204,750	\$58,114,000	\$11,622,800	\$69,941,550	316,862	203,810
2052	51	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2053	52	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2054	53	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2055	54	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2056	55	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2057	56	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2058	57	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2059	58	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2060	59	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
2061	60	No Action	\$68,250	\$0	\$11,622,800	\$11,691,050	316,862	203,810
	Total - Non-Discounted		\$8,090,227	\$350,401,840	\$641,037,973	\$999,530,040	17,263,417	11,012,613
	Present Value at 3.2% discount rate					\$462,527,331	7,077,559	4,480,295
	PV cost per pound of P removed						\$65.35	\$103.24
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)						287,724	183,544

Table D-32
Present Value of Change in Regional Income Due to:
Combination 16: PCAs 9 and 2 - Tributary Sediment Removal with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$0	\$565,980	\$0	\$0	\$565,980	\$565,980
2003	2	No Action	\$0	\$565,980	\$0	\$0	\$565,980	\$565,980
2004	3	No Action	\$0	\$565,980	\$0	\$0	\$565,980	\$565,980
2005	4	No Action	-\$7,431,778	\$167,540	\$13,290,741	\$1,432,397	\$14,890,678	\$7,458,900
2006	5	Planning and Design	-\$14,924,057	\$209,304	\$12,865,624	\$2,874,033	\$15,948,960	\$1,024,903
2007	6	Design and Real Estate Purchases	-\$22,494,301	\$188,422	\$12,891,474	\$4,324,906	\$17,404,801	-\$5,089,500
2008	7	Design and Real Estate Purchases	-\$22,589,522	\$62,767	\$167,556	\$5,785,017	\$6,015,340	-\$16,574,182
2009	8	No Action	-\$22,680,274	\$41,885	\$141,706	\$5,803,493	\$5,987,084	-\$16,693,190
2010	9	Sediment Removal Operations	-\$22,771,027	\$62,767	\$408,984	\$5,821,969	\$6,293,721	-\$16,477,306
2011	10	Sediment Removal Operations	-\$22,861,779	\$62,767	\$436,076	\$5,840,446	\$6,339,289	-\$16,522,491
2012	11	Sediment Removal Operations	-\$22,952,532	\$62,767	\$436,076	\$5,858,922	\$6,357,765	-\$16,594,767
2013	12	Sediment Removal Operations	-\$23,043,284	\$62,767	\$292,205	\$5,877,398	\$6,232,370	-\$16,810,914
2014	13	No Action	-\$23,134,037	\$41,885	\$141,706	\$5,895,874	\$6,079,465	-\$17,054,572
2015	14	No Action	-\$23,224,789	\$41,885	\$141,706	\$5,914,350	\$6,097,941	-\$17,126,848
2016	15	No Action	-\$23,315,542	\$41,885	\$141,706	\$5,932,826	\$6,116,417	-\$17,199,125
2017	16	No Action	-\$23,406,294	\$41,885	\$141,706	\$5,951,302	\$6,134,893	-\$17,271,401
2018	17	No Action	-\$23,497,047	\$125,655	\$21,184,554	\$5,969,778	\$27,279,987	\$3,782,940
2019	18	No Action	-\$23,587,799	\$41,885	\$141,706	\$5,988,254	\$6,171,845	-\$17,415,954
2020	19	No Action	-\$23,678,552	\$41,885	\$141,706	\$6,006,730	\$6,190,321	-\$17,488,230
2021	20	No Action	-\$23,769,304	\$41,885	\$141,706	\$6,025,206	\$6,208,797	-\$17,560,507
2022	21	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2023	22	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2024	23	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213

Table D-32 (Continued)
Present Value of Change in Regional Income Due to:
Combination 16: PCAs 9 and 2 - Tributary Sediment Removal with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2026	25	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2027	26	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2028	27	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2029	28	No Action	-\$23,769,304	\$125,655	\$21,042,848	\$6,025,206	\$27,193,709	\$3,424,405
2030	29	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2031	30	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2032	31	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2033	32	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2034	33	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2035	34	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2036	35	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2037	36	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2038	37	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2039	38	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2040	39	No Action	-\$23,769,304	\$125,655	\$21,042,848	\$6,025,206	\$27,193,709	\$3,424,405
2041	40	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2042	41	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2043	42	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2044	43	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2045	44	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2046	45	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2047	46	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213

Table D-32 (Continued)
Present Value of Change in Regional Income Due to:
Combination 16: PCAs 9 and 2 - Tributary Sediment Removal with
Wetlands Treatment of Runoff at Edge of Property

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2049	48	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2050	49	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2051	50	No Action	-\$23,769,304	\$125,655	\$21,042,848	\$6,025,206	\$27,193,709	\$3,424,405
2052	51	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2053	52	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2054	53	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2055	54	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2056	55	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2057	56	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2058	57	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2059	58	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2060	59	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
2061	60	No Action	-\$23,769,304	\$41,885	\$0	\$6,025,206	\$6,067,091	-\$17,702,213
	Total Non-Discounted		-\$1,320,134,077	\$4,964,486	\$126,235,480	\$332,311,156	\$463,511,122	-\$856,622,955
	Present Value at 3.2% discount rate							-\$331,040,900

Table D-33
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 17: PCAs 9 and 3 - Tributary Sediment Removal with
on-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$409,500	\$0	\$0	\$409,500	0	0
2003	2	No Action	\$409,500	\$0	\$0	\$409,500	0	0
2004	3	No Action	\$409,500	\$0	\$0	\$409,500	0	0
2005	4	No Action	\$136,500	\$0	\$13,430,616	\$13,567,116	425,348	265,534
2006	5	Planning and Design	\$204,750	\$73,256	\$13,436,862	\$13,714,869	426,540	266,229
2007	6	Design and Real Estate Purchases	\$170,625	\$472,219	\$13,443,109	\$14,085,953	427,731	266,924
2008	7	Design and Real Estate Purchases	\$170,625	\$574,294	\$13,449,356	\$14,194,275	428,922	267,620
2009	8	No Action	\$136,500	\$0	\$13,455,603	\$13,592,103	430,114	268,315
2010	9	Sediment Removal Operations	\$170,625	\$950,721	\$13,461,849	\$14,583,196	431,305	269,010
2011	10	Sediment Removal Operations	\$170,625	\$1,047,088	\$13,468,096	\$14,685,810	432,496	269,705
2012	11	Sediment Removal Operations	\$170,625	\$1,047,088	\$13,474,343	\$14,692,056	433,687	270,400
2013	12	Sediment Removal Operations	\$170,625	\$535,333	\$13,480,590	\$14,186,548	434,879	271,096
2014	13	No Action	\$136,500	\$0	\$13,486,837	\$13,623,337	471,350	307,071
2015	14	No Action	\$136,500	\$0	\$13,493,083	\$13,629,583	472,541	307,766
2016	15	No Action	\$136,500	\$0	\$13,499,330	\$13,635,830	473,732	308,461
2017	16	No Action	\$136,500	\$0	\$13,505,577	\$13,642,077	474,924	309,156
2018	17	No Action	\$136,500	\$0	\$13,511,824	\$13,648,324	476,115	309,852
2019	18	No Action	\$136,500	\$0	\$13,518,070	\$13,654,570	477,306	310,547
2020	19	No Action	\$136,500	\$0	\$13,524,317	\$13,660,817	478,497	311,242
2021	20	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2022	21	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2023	22	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937

Table D-33 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 17: PCAs 9 and 3 - Tributary Sediment Removal with
on-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2024	23	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2025	24	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2026	25	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2027	26	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2028	27	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2029	28	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2030	29	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2031	30	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2032	31	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2033	32	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2034	33	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2035	34	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2036	35	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2037	36	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2038	37	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2039	38	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2040	39	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2041	40	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2042	41	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2043	42	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2044	43	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2045	44	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937

Table D-33 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 17: PCAs 9 and 3 - Tributary Sediment Removal with
on-Structural Management at the Land Parcel Level

Tracking Year	Year	PCA 9 Activity	Costs				Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2046	45	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2047	46	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2048	47	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2049	48	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2050	49	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2051	50	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2052	51	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2053	52	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2054	53	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2055	54	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2056	55	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2057	56	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2058	57	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2059	58	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2060	59	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
2061	60	No Action	\$136,500	\$0	\$13,530,564	\$13,667,064	479,689	311,937
Total - Non-Discounted			\$9,282,000	\$4,700,000	\$770,392,584	\$784,374,584	26,862,716	17,368,355
Present Value at 3.2% discount rate						\$338,376,360	11,355,414	7,303,424
PV cost per pound of P removed							\$29.80	\$46.33
Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							447,712	289,473

Table D-34
Present Value of Change in Regional Income Due to:
Combination 17: PCAs 9 and 3 - Tributary Sediment Removal with Non-Structural Analysis at the Land Parcel Level

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$0	\$251,301	\$0	\$0	\$251,301	\$251,301
2003	2	No Action	\$0	\$251,301	\$0	\$0	\$251,301	\$251,301
2004	3	No Action	\$0	\$251,301	\$0	\$0	\$251,301	\$251,301
2005	4	No Action	\$0	\$83,767	\$0	\$635,871	\$719,638	\$719,638
2006	5	Planning and Design	\$0	\$125,531	\$0	\$643,081	\$768,612	\$768,612
2007	6	Design and Real Estate Purchases	-\$17,463	\$104,649	\$25,850	\$650,292	\$780,791	\$763,327
2008	7	Design and Real Estate Purchases	-\$21,931	\$104,649	\$25,850	\$657,502	\$788,001	\$766,070
2009	8	No Action	-\$21,931	\$83,767	\$0	\$664,713	\$748,480	\$726,549
2010	9	Sediment Removal Operations	-\$21,931	\$104,649	\$267,279	\$671,923	\$1,043,850	\$1,021,919
2011	10	Sediment Removal Operations	-\$21,931	\$104,649	\$294,370	\$679,134	\$1,078,153	\$1,056,222
2012	11	Sediment Removal Operations	-\$21,931	\$104,649	\$294,370	\$686,344	\$1,085,363	\$1,063,432
2013	12	Sediment Removal Operations	-\$21,931	\$104,649	\$150,499	\$693,554	\$948,703	\$926,772
2014	13	No Action	-\$21,931	\$83,767	\$0	\$700,765	\$784,532	\$762,601
2015	14	No Action	-\$21,931	\$83,767	\$0	\$707,975	\$791,742	\$769,811
2016	15	No Action	-\$21,931	\$83,767	\$0	\$715,186	\$798,953	\$777,022
2017	16	No Action	-\$21,931	\$83,767	\$0	\$722,396	\$806,163	\$784,232
2018	17	No Action	-\$21,931	\$83,767	\$0	\$729,607	\$813,374	\$791,443
2019	18	No Action	-\$21,931	\$83,767	\$0	\$736,817	\$820,584	\$798,653
2020	19	No Action	-\$21,931	\$83,767	\$0	\$744,028	\$827,795	\$805,864
2021	20	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2022	21	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2023	22	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2024	23	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074

Table D-34 (Continued)
Present Value of Change in Regional Income Due to:
Combination 17: PCAs 9 and 3 - Tributary Sediment Removal with Non-Structural Analysis at the Land Parcel Level

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2026	25	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2027	26	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2028	27	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2029	28	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2030	29	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2031	30	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2032	31	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2033	32	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2034	33	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2035	34	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2036	35	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2037	36	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2038	37	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2039	38	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2040	39	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2041	40	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2042	41	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2043	42	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2044	43	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2045	44	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2046	45	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2047	46	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074

Table D-34 (Continued)
Present Value of Change in Regional Income Due to:
Combination 17: PCAs 9 and 3 - Tributary Sediment Removal with Non-Structural Analysis at the Land Parcel Level

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2049	48	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2050	49	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2051	50	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2052	51	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2053	52	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2054	53	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2055	54	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2056	55	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2057	56	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2058	57	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2059	58	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2060	59	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
2061	60	No Action	-\$21,931	\$83,767	\$0	\$751,238	\$835,005	\$813,074
	Total Non-Discounted		-\$1,201,739	\$5,695,679	\$1,058,219	\$41,839,954	\$48,593,853	\$47,392,113
	Present Value at 3.2% discount rate							\$20,183,942

Table D-35
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 18: PCAs 9 and 6 - Tributary Sediment Removal with Alternative Land Uses

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Reduction in Land Value	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2002	1	No Action	\$409,500	\$0	\$0	\$0	\$409,500	0	0
2003	2	No Action	\$409,500	\$0	\$0	\$0	\$409,500	0	0
2004	3	No Action	\$409,500	\$0	\$0	\$0	\$409,500	0	0
2005	4	No Action	\$409,500	\$0	\$0	\$0	\$409,500	0	0
2006	5	Planning and Design	\$887,250	\$12,401,338	\$0	\$69,439,739	\$82,728,327	0	0
2007	6	Design and Real Estate Purchases	\$853,125	\$12,826,673	\$0	\$69,439,739	\$83,119,537	13,384	8,165
2008	7	Design and Real Estate Purchases	\$853,125	\$12,955,120	\$0	\$69,439,739	\$83,247,984	27,091	16,532
2009	8	No Action	\$819,000	\$12,407,198	\$0	\$69,439,739	\$82,665,937	41,121	25,099
2010	9	Sediment Removal Operations	\$853,125	\$13,384,292	\$0	\$69,439,739	\$83,677,156	55,473	33,868
2011	10	Sediment Removal Operations	\$853,125	\$13,507,031	\$0	\$69,439,739	\$83,799,895	70,149	42,838
2012	11	Sediment Removal Operations	\$170,625	\$1,047,088	\$0	\$2,362,851	\$3,580,564	89,052	54,362
2013	12	Sediment Removal Operations	\$170,625	\$535,333	\$0	\$2,362,851	\$3,068,809	92,639	56,564
2014	13	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	131,563	94,083
2015	14	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	135,265	96,356
2016	15	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	139,024	98,666
2017	16	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	142,840	101,011
2018	17	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	146,714	103,392
2019	18	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	150,645	105,809
2020	19	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	154,633	108,262
2021	20	No Action	\$136,500	\$0	\$0	\$2,362,851	\$2,499,351	158,679	110,750
2022	21	No Action	\$136,500	\$0	\$0	\$0	\$136,500	161,498	112,474

Table D-35 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 18: PCAs 9 and 6 - Tributary Sediment Removal with Alternative Land Uses

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Reduction in Land Value	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2023	22	No Action	\$136,500	\$0	\$0	\$0	\$136,500	164,316	114,198
2024	23	No Action	\$136,500	\$0	\$0	\$0	\$136,500	167,135	115,922
2025	24	No Action	\$136,500	\$0	\$0	\$0	\$136,500	169,954	117,645
2026	25	No Action	\$136,500	\$0	\$0	\$0	\$136,500	172,773	119,369
2027	26	No Action	\$136,500	\$0	\$0	\$0	\$136,500	175,591	121,093
2028	27	No Action	\$136,500	\$0	\$0	\$0	\$136,500	178,410	122,817
2029	28	No Action	\$136,500	\$0	\$0	\$0	\$136,500	181,229	124,541
2030	29	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2031	30	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2032	31	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2033	32	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2034	33	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2035	34	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2036	35	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2037	36	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2038	37	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2039	38	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2040	39	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2041	40	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2042	41	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2043	42	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265

Table D-35 (Continued)
Cost-Effectiveness Analysis
Present Value Cost per Pound of Phosphorus Removed
Combination 18: PCAs 9 and 6 - Tributary Sediment Removal with Alternative Land Uses

Tracking Year	Year	PCA 9 Activity	Costs					Phosphorus Removed in Pounds	
			Public Costs	Capital Cost	Annual O&M Cost	Reduction in Land Value	Total Costs	At Edge of Field	At Lake
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2044	43	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2045	44	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2046	45	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2047	46	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2048	47	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2049	48	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2050	49	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2051	50	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2052	51	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2053	52	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2054	53	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2055	54	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2056	55	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2057	56	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2058	57	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2059	58	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2060	59	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
2061	60	No Action	\$136,500	\$0	\$0	\$0	\$136,500	184,048	126,265
	Total - Non-Discounted		\$13,650,000	\$79,064,074	\$0	\$440,266,941	\$532,981,015	8,808,706	6,044,300
	Present Value at 3.2% discount rate						\$427,235,085	3,217,742	2,203,452
	PV cost per pound of P removed							\$132.77	\$193.89
	Average Annual Pounds of Phosphorus Removed (From Year 1 to Year 60)							146,812	100,738

Table D-36
Present Value of Change in Regional Income Due to:
Combination 18: PCAs 9 and 6 - Tributary Sediment Removal with Alternative Land Uses

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2002	1	No Action	\$0	\$251,310	\$0	\$0	\$251,310	\$251,310
2003	2	No Action	\$0	\$251,310	\$0	\$0	\$251,310	\$251,310
2004	3	No Action	\$0	\$251,310	\$0	\$0	\$251,310	\$251,310
2005	4	No Action	\$0	\$251,310	\$0	\$0	\$251,310	\$251,310
2006	5	Planning and Design	-\$234,318,405	\$544,384	\$8,529,728	\$0	\$9,074,112	-\$225,244,293
2007	6	Design and Real Estate Purchases	-\$237,115,112	\$523,502	\$8,659,501	\$0	\$9,183,003	-\$227,932,110
2008	7	Design and Real Estate Purchases	-\$239,917,764	\$523,502	\$8,763,423	\$0	\$9,286,925	-\$230,630,839
2009	8	No Action	-\$242,734,888	\$502,620	\$8,841,495	\$0	\$9,344,116	-\$233,390,773
2010	9	Sediment Removal Operations	-\$245,570,952	\$523,502	\$9,212,696	\$0	\$9,736,198	-\$235,834,754
2011	10	Sediment Removal Operations	-\$248,425,956	\$523,502	\$9,343,711	\$0	\$9,867,213	-\$238,558,743
2012	11	Sediment Removal Operations	-\$250,107,031	\$104,652	\$294,370	\$0	\$399,022	-\$249,708,009
2013	12	Sediment Removal Operations	-\$251,788,107	\$104,652	\$150,499	\$0	\$255,151	-\$251,532,956
2014	13	No Action	-\$253,469,182	\$83,770	\$0	\$0	\$83,770	-\$253,385,412
2015	14	No Action	-\$255,150,258	\$83,770	\$0	\$0	\$83,770	-\$255,066,488
2016	15	No Action	-\$256,831,333	\$83,770	\$0	\$0	\$83,770	-\$256,747,563
2017	16	No Action	-\$258,512,409	\$83,770	\$0	\$0	\$83,770	-\$258,428,639
2018	17	No Action	-\$260,193,484	\$83,770	\$0	\$0	\$83,770	-\$260,109,714
2019	18	No Action	-\$261,874,560	\$83,770	\$0	\$0	\$83,770	-\$261,790,790
2020	19	No Action	-\$263,555,635	\$83,770	\$0	\$0	\$83,770	-\$263,471,865
2021	20	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2022	21	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2023	22	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2024	23	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941

Table D-36 (Continued)
Present Value of Change in Regional Income Due to:
Combination 18: PCAs 9 and 6 - Tributary Sediment Removal with Alternative Land Uses

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2025	24	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2026	25	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2027	26	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2028	27	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2029	28	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2030	29	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2031	30	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2032	31	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2033	32	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2034	33	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2035	34	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2036	35	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2037	36	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2038	37	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2039	38	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2040	39	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2041	40	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2042	41	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2043	42	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2044	43	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2045	44	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2046	45	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2047	46	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941

Table D-36 (Continued)
Present Value of Change in Regional Income Due to:
Combination 18: PCAs 9 and 6 - Tributary Sediment Removal with Alternative Land Uses

Tracking Year	Year	PCA 9 Activity	From Land Use Change	From Local Expenditures				Total
				From Public Costs	From Capital Cost	From Annual O&M Cost	From All	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2048	47	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2049	48	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2050	49	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2051	50	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2052	51	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2053	52	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2054	53	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2055	54	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2056	55	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2057	56	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2058	57	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2059	58	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2060	59	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
2061	60	No Action	-\$265,236,711	\$83,770	\$0	\$0	\$83,770	-\$265,152,941
	Total Non-Discounted		-\$14,634,270,228	\$8,376,519	\$53,795,424	\$0	\$62,171,943	-\$14,572,098,285
	Present Value at 3.2% discount rate							-\$5,843,893,613

Appendix E

Study Area Land Use by Sub-Basin

Table E-1
Land Use in the Study Area of the Lake Okeechobee Watershed by Sub-Basin - 1998 (Acres)

Sub-Basin	Aqua- culture	Barren	Citrus	Dairies	Fallow Crop Land	Field Crops	Sugar Cane	Flori- culture	Fruit Orchard	Horse Farm	Improved Pasture	Ornamentals
C-40	0	678	4,005	0	235	0	0	0	0	0	24,132	0
C-41	5	1,369	17,639	0	551	2,057	0	0	0	57	32,615	9
C-41A	0	786	8,621	0	203	73	0	0	0	0	19,181	0
Fisheating Creek	60	169	8,846	0	801	1,688	0	0	0	20	78,982	58
L-48	0	493	277	0	17	62	0	0	31	0	14,429	0
L-49	0	345	134	0	0	0	0	0	0	0	6,481	0
L-59E	0	1,139	0	0	0	0	0	0	0	0	8,309	0
L-59W	0	29	0	0	0	0	0	0	0	0	3,261	0
L-60E	0	20	0	0	0	0	0	0	0	0	1,431	0
L-60W	0	30	149	0	0	0	0	0	0	0	1,108	0
L-61E	0	161	0	0	191	0	0	0	0	0	5,508	0
L-61W	0	80	0	0	0	0	0	0	0	0	3,412	0
Nicodemus Slough	0	255	30	42	0	1,115	3,737	0	0	0	9,786	0
S-131	200	227	33	0	0	0	0	0	0	0	4,479	0
S-133	11	240	159	20	0	0	0	0	0	0	10,858	0
S-135	98	610	630	3	0	0	5,647	0	0	0	4,827	0
S-154	0	7	0	2,394	158	420	0	0	12	109	16,232	0
S-154C	0	122	0	0	0	0	0	0	0	0	1,729	0
S-191-Taylor Creek/ Nubbin Slough	35	4	3,237	12,062	589	2,136	0	0	27	58	55,639	68
S-65A	0	757	1,550	1,490	0	103	0	0	0	15	29,006	0
S-65B	0	1,374	671	0	390	787	0	0	0	0	21,463	0
S-65C	0	922	4,371	0	63	222	0	0	68	223	23,517	0
S-65D	0	653	3,908	2,099	691	505	0	21	776	370	44,747	12
S-65E	0	705	962	2,091	227	247	0	0	0	0	11,672	0
Totals	409	11,174	55,222	20,200	4,115	9,415	9,384	21	913	852	432,806	146

Source: South Florida Water Management District, "Lake Okeechobee Agricultural Decision Support System (LOADSS)", Revised 1998.

Table E-1 (Continued)
Land Use in the Study Area of the Lake Okeechobee Watershed by Sub-Basin - 1998 (Acres)

Sub-Basin	Other	Other Grove	Range- land	Row Crops	Sod Farms	Transportation Communication and Utilities	Tree Nursery	Upland Forest	Urban and Built-up	Un- improved Pasture	Water	Wetlands	Woodland Pasture	Total
C-40	0	0	722	34	1,809	42	0	4,177	168	1,681	191	5,528	564	43,964
C-41	30	9	3,791	429	269	195	0	9,093	3,187	10,677	857	9,776	2,309	94,926
C-41A	0	5	2,427	431	9	149	0	2,124	36	12,395	2,513	9,514	22	58,487
Fisheating Creek	31	6	28,764	992	0	968	0	66,770	2,873	17,641	1,020	68,783	3,714	282,186
L-48	0	0	17	457	0	49	0	575	598	879	331	2,549	10	20,774
L-49	0	0	1,472	32	0	0	0	817	239	1,247	280	1,023	24	12,093
L-59E	0	0	426	0	0	596	0	1,132	172	174	279	2,180	27	14,436
L-59W	0	0	754	103	0	0	0	1,523	10	344	28	265	122	6,440
L-60E	0	0	1,018	0	0	0	0	2,097	97	12	0	362	0	5,038
L-60W	0	0	541	0	0	0	0	979	20	340	4	100	0	3,271
L-61E	0	0	1,145	0	0	0	0	2,519	19	2,438	17	2,154	134	14,286
L-61W	0	0	786	3	0	0	0	2,645	0	2,757	21	3,569	294	13,567
Nicodemus Slough	0	0	425	23	0	123	0	3,259	1	843	147	4,138	1,157	25,081
S-131	0	0	26	207	0	0	11	420	518	165	212	556	109	7,164
S-133	0	0	396	0	0	653	10	2,051	7,850	853	1,060	1,500	0	25,660
S-135	0	0	147	888	0	664	169	1,090	979	278	592	835	0	17,455
S-154	15	0	1,724	378	0	305	272	1,451	2,724	323	167	4,353	575	31,619
S-154C	0	0	0	0	0	0	0	110	0	0	42	175	0	2,179
S-191-Taylor Creek/ Nubbin Slough	218	0	2,460	1,913	0	120	1,718	15,115	6,199	6,674	1,536	11,490	518	121,817
S-65A	0	0	14,544	585	0	370	0	14,179	10,824	7,104	251	22,349	18	103,146
S-65B	0	0	43,311	0	59	501	0	11,956	1,673	1,424	275	36,147	9	120,039
S-65C	0	0	2,832	16	0	412	0	4,178	16	1,956	368	11,279	0	50,444
S-65D	0	0	14,087	2,262	0	837	0	11,956	1,596	2,802	2,484	26,774	7	116,587
S-65E	0	0	1,246	1,909	0	397	12	3,539	665	2,061	517	2,797	111	29,157
Totals	294	21	123,059	10,663	2,145	6,381	2,193	163,755	40,465	75,069	13,193	228,195	9,725	1,219,814

Source: South Florida Water Management District, "Lake Okeechobee Agricultural Decision Support System (LOADSS)", Revised 1998.

Table E-2
Change in Land Use Acreage from 1998 to 2021 –
Study Area of Lake Okeechobee Watershed - By County

Land Use Code	Land Use Description	Change in Acreage from 1998 to 2021 (Acres)							TOTAL
		GLADES	HIGHLANDS	MARTIN	OKEECHOBEE	OSCEOLA	POLK	ST. LUCIE	
211	Improved Pastures	-1,034	-11,352	-1,066	-16,419	0	0	-185	-30,055
600	Wetlands	0	0	0	0	0	0	0	0
400	Upland Forest	0	0	0	0	0	0	0	0
300	Rangeland	0	0	0	0	-912	0	0	-912
212	Unimproved Pastures	-1,034	-11,352	0	0	0	0	0	-12,386
221	Citrus Groves	0	14,100	446	0	524	0	185	15,255
100	Urban & Built-up	1,725	4,762	0	11,553	0	0	0	18,040
252	Dairies	0	0	0	0	0	0	0	0
500	Water	0	0	0	0	0	0	0	0
214	Row Crops	0	2,051	620	1,000	388	0	0	4,059
800	Trans., Comm. & Utilities	343	1,602	0	2,866	0	0	0	4,811
2156	Field Crops - Sugar Cane	0	0	0	0	0	0	0	0
213	Woodland Pastures	0	0	0	0	0	0	0	0
215	Field Crops	0	0	0	0	0	0	0	0
261	Fallow Cropland	0	0	0	0	0	0	0	0
241	Tree Nurseries	0	0	0	0	0	0	0	0
700	Barren Land	0	0	0	0	0	0	0	0
242	Sod farms	0	152	0	0	0	0	0	152
222	Fruit Orchards	0	0	0	0	0	0	0	0
251	Horse Farms	0	0	0	0	0	0	0	0
254	Aquaculture	0	0	0	1,000	0	0	0	1,000
000	No Label	0	0	0	0	0	0	0	0
259	Other	0	0	0	0	0	0	0	0
243	Ornamentals	0	28	0	0	0	0	0	28
223	Other Groves	0	0	0	0	0	0	0	0
245	Floriculture	0	9	0	0	0	0	0	9
Net Change in Acreage		0	0	0	0	0	0	0	0

Table E-3
Distribution of Land Use Change from County Level to Sub-Basin Level
Proportion of 1995 County-Level Land Use within the Sub-Basin

Sub-Basin	Aquaculture	Citrus					Dairies	Floriculture
	Okeechobee	Highlands	Martin	Okeechobee	Osceola	St. Lucie	Okeechobee	Highlands
C-40	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
C-41	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00
C-41A	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
Fisheating Creek	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
L-48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-59E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-59W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-60E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-60W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-61E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-61W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nicodemus Slough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-133	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-135	0.68	0.00	1.00	0.00	0.00	0.00	0.00	0.00
S-154	0.00	0.00	0.00	0.07	0.00	0.00	0.13	0.00
S-154C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-191-Taylor Creek/ Nubbin Slough	0.25	0.00	0.00	0.28	0.00	1.00	0.65	0.00
S-65A	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00
S-65B	0.00	0.00	0.00	0.18	0.88	0.00	0.00	0.00
S-65C	0.00	0.09	0.00	0.03	0.00	0.00	0.00	0.00
S-65D	0.00	0.08	0.00	0.33	0.00	0.00	0.11	1.00
S-65E	0.00	0.02	0.00	0.11	0.00	0.00	0.11	0.00
Totals	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table E-3 (Continued)
Distribution of Land Use Change from County Level to Sub-Basin Level
Proportion of 1995 County-Level Land Use within the Sub-Basin

Sub-Basin	Improved Pasture							Ornamentals
	Glades	Highlands	Martin	Okeechobee	Osceola	Polk	St. Lucie	Highlands
C-40	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00
C-41	0.17	0.14	0.00	0.00	0.00	0.00	0.00	0.11
C-41A	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Fisheating Creek	0.41	0.34	0.00	0.00	0.00	0.00	0.00	0.73
L-48	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-49	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-59E	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-59W	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-60E	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-60W	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-61E	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-61W	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nicodemus Slough	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-131	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-133	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
S-135	0.00	0.00	1.00	0.03	0.00	0.00	0.00	0.00
S-154	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
S-154C	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
S-191 - Taylor Creek / Nubbin Slough	0.00	0.00	0.00	0.29	0.00	0.00	1.00	0.00
S-65A	0.00	0.00	0.00	0.00	0.57	0.57	0.00	0.00
S-65B	0.00	0.00	0.00	0.11	0.43	0.43	0.00	0.00
S-65C	0.00	0.10	0.00	0.12	0.00	0.00	0.00	0.00
S-65D	0.00	0.19	0.00	0.23	0.00	0.00	0.00	0.15
S-65E	0.00	0.05	0.00	0.06	0.00	0.00	0.00	0.00
Totals	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table E-3 (Continued)
Distribution of Land Use Change from County Level to Sub-Basin Level
Proportion of 1995 County-Level Land Use within the Sub-Basin

Sub-Basin	Rangeland		Row Crops				Sod Farms	Transportation Communication and Utilites		
	Okeechobee	Osceola	Highlands	Martin	Okeechobee	Osceola	Highlands	Glades	Highlands	Okeechobee
C-40	0.00	0.00	0.01	0.00	0.00	0.00	0.87	0.02	0.01	0.00
C-41	0.00	0.00	0.07	0.00	0.00	0.00	0.13	0.10	0.07	0.00
C-41A	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.05	0.00
Fisheating Creek	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.49	0.32	0.00
L-48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
L-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-59E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00
L-59W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-60E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-60W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-61E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L-61W	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nicodemus Slough	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
S-131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-133	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
S-135	0.00	0.00	0.00	1.00	0.12	0.00	0.00	0.00	0.00	0.17
S-154	0.03	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.08
S-154C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-191-Taylor Creek/ Nubbin Slough	0.04	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.03
S-65A	0.00	0.25	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
S-65B	0.65	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
S-65C	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.11
S-65D	0.21	0.00	0.37	0.00	0.31	0.00	0.00	0.00	0.28	0.22
S-65E	0.02	0.00	0.31	0.00	0.26	0.00	0.00	0.00	0.13	0.10
Totals	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table E-3 (Continued)
Distribution of Land Use Change from County Level to Sub-Basin Level
Proportion of 1995 County-Level Land Use within the Sub-Basin

Sub-Basin	Upland Forest	Urban and Built-Up			Unimproved Pasture			Wetlands
	Okeechobee	Glades	Highlands	Okeechobee	Glades	Highlands	Okeechobee	Okeechobee
C-40	0.00	0.02	0.02	0.00	0.04	0.03	0.00	0.00
C-41	0.00	0.40	0.37	0.00	0.27	0.22	0.00	0.00
C-41A	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00
Fisheating Creek	0.00	0.36	0.34	0.00	0.45	0.36	0.00	0.00
L-48	0.00	0.08	0.00	0.00	0.02	0.00	0.00	0.00
L-49	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.00
L-59E	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
L-59W	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
L-60E	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
L-60W	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
L-61E	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
L-61W	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
Nicodemus Slough	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
S-131	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
S-133	0.04	0.00	0.00	0.36	0.00	0.00	0.05	0.02
S-135	0.02	0.00	0.00	0.05	0.00	0.00	0.02	0.01
S-154	0.03	0.00	0.00	0.13	0.00	0.00	0.02	0.05
S-154C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-191 - Taylor Creek / Nubbin Slough	0.29	0.00	0.00	0.29	0.00	0.00	0.41	0.12
S-65A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
S-65B	0.23	0.00	0.00	0.08	0.00	0.00	0.09	0.38
S-65C	0.08	0.00	0.00	0.00	0.00	0.04	0.12	0.12
S-65D	0.23	0.00	0.19	0.07	0.00	0.06	0.17	0.28
S-65E	0.07	0.00	0.08	0.03	0.00	0.04	0.13	0.03
Totals	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table E-4
Proportion of the Sub-Basin That is Located in Each County

Basin	Glades	Highlands	Martin	Okeechobee	Osceola	Polk	St. Lucie	Total
C-40	0.80	0.20						1.00
C-41	0.40	0.60						1.00
C-41A		1.00						1.00
Fisheating Creek	0.30	0.70						1.00
L-48	1.00							1.00
L-49	1.00							1.00
L-59E	1.00							1.00
L-59W	1.00							1.00
L-60E	1.00							1.00
L-60W	1.00							1.00
L-61E	1.00							1.00
L-61W	1.00							1.00
Nicodemus Slough	1.00							1.00
S-131	1.00							1.00
S-133				1.00				1.00
S-135			0.50	0.50				1.00
S-154				1.00				1.00
S-154C				1.00				1.00
S-191 - Taylor Creek / Nubbin Slough				0.91			0.09	1.00
S-65A					0.50	0.50		1.00
S-65B				0.70	0.20	0.10		1.00
S-65C		0.40		0.60				1.00
S-65D		0.10		0.90				1.00
S-65E		0.50		0.50				1.00

Table E-5
Land Use Projections in the Study Area of the Lake Okeechobee Watershed by Sub-Basin - 2021 (Acres)

Basin	Aquaculture	Barren	Citrus	Dairies	Fallow Crop Land	Field Crops	Sugar Cane	Floriculture	Fruit Orchard	Horse Farm
C-40	0	678	5,173	0	235	0	0	0	0	0
C-41	5	1,369	22,783	0	551	2,057	0	0	0	57
C-41A	0	786	11,134	0	203	73	0	0	0	0
Fisheating Creek	60	169	11,426	0	801	1,688	0	0	0	20
L-48	0	493	277	0	17	62	0	0	31	0
L-49	0	345	134	0	0	0	0	0	0	0
L-59E	0	1,139	0	0	0	0	0	0	0	0
L-59W	0	29	0	0	0	0	0	0	0	0
L-60E	0	20	0	0	0	0	0	0	0	0
L-60W	0	30	149	0	0	0	0	0	0	0
L-61E	0	161	0	0	191	0	0	0	0	0
L-61W	0	80	0	0	0	0	0	0	0	0
Nicodemus Slough	0	255	30	42	0	1,115	3,737	0	0	0
S-131	200	227	33	0	0	0	0	0	0	0
S-133	84	240	159	20	0	0	0	0	0	0
S-135	779	610	1,076	3	0	0	5,647	0	0	0
S-154	0	7	0	2,394	158	420	0	0	12	109
S-154C	0	122	0	0	0	0	0	0	0	0
S-191 - Taylor Creek / Nubbin Slough	281	4	3,422	12,062	589	2,136	0	0	27	58
S-65A	0	757	1,611	1,490	0	103	0	0	0	15
S-65B	0	1,374	1,134	0	390	787	0	0	0	0
S-65C	0	922	5,646	0	63	222	0	0	68	223
S-65D	0	653	5,048	2,099	691	505	0	29	776	370
S-65E	0	705	1,243	2,091	227	247	0	0	0	0
(1) Total - 2021 (sum of above)	1,409	11,174	70,477	20,200	4,115	9,415	9,384	29	913	852
(2) Total - 1995	409	11,174	55,222	20,200	4,115	9,415	9,384	21	913	852
(3) Difference by Sub-Basin: 1995 to 2021 = (1) minus (2)	1,000	0	15,255	0	0	0	0	9	0	0
(4) Difference by County: 1995 to 2021	1,000	0	15,255	0	0	0	0	9	0	0
(5) Change in Total Acres = (3) minus (4)	0	0	0	0	0	0	0	0	0	0

Table E-5 (Continued)
Land Use Projections in the Study Area of the Lake Okeechobee Watershed by Sub-Basin - 2021 (Acres)

Basin	Improved Pasture	Ornamentals	Other	Other Grove	Rangeland	Row Crops	Sod Farms	Transportation Communication and Utilites	Tree Nursery
C-40	23,087	0	0	0	722	46	1,940	71	0
C-41	29,147	12	30	9	3,791	574	289	333	0
C-41A	19,276	0	0	5	2,427	577	9	229	0
Fisheating Creek	75,927	79	31	6	28,764	1,327	0	1,654	0
L-48	14,313	0	0	0	17	457	0	58	0
L-49	6,461	0	0	0	1,472	32	0	0	0
L-59E	8,173	0	0	0	426	0	0	699	0
L-59W	3,268	0	0	0	754	103	0	0	0
L-60E	1,410	0	0	0	1,018	0	0	0	0
L-60W	1,112	0	0	0	541	0	0	0	0
L-61E	5,569	0	0	0	1,145	0	0	0	0
L-61W	3,485	0	0	0	786	3	0	0	0
Nicodemus Slough	9,787	0	0	0	425	23	0	145	0
S-131	4,370	0	0	0	26	207	0	0	11
S-133	6,612	0	0	0	396	0	0	1,134	10
S-135	2,166	0	0	0	147	1,628	0	1,153	169
S-154	14,597	0	15	0	1,724	430	0	529	272
S-154C	1,797	0	0	0	0	0	0	0	0
S-191 - Taylor Creek / Nubbin Slough	52,285	68	218	0	2,460	2,173	0	208	1,718
S-65A	28,786	0	0	0	14,314	973	0	370	0
S-65B	20,205	0	0	0	42,628	0	59	870	0
S-65C	22,938	0	0	0	2,832	24	0	936	0
S-65D	38,752	17	0	0	14,087	3,333	0	1,900	0
S-65E	9,227	0	0	0	1,246	2,812	0	902	12
(1) Total - 2021 (sum of above)	402,751	175	294	21	122,147	14,722	2,297	11,192	2,193
(2) Total - 1995	432,806	146	294	21	123,059	10,663	2,145	6,381	2,193
(3) Difference by Sub-Basin: 1995 to 2021 = (1) minus (2)	-30,055	28	0	0	-912	4,059	152	4,811	0
(4) Difference by County: 1995 to 2021	-30,055	28	0	0	-912	4,059	152	4,811	0
(5) Change in Total Acres = (3) minus (4)	0	0	0	0	0	0	0	0	0

Table E-5 (Continued)
Land Use Projections in the Study Area of the Lake Okeechobee Watershed by Sub-Basin - 2021 (Acres)

Basin	Upland Forest	Urban and Built-up	Unimproved Pasture	Water	Wetlands	Woodland Pasture	Total - 1995	Total - 2021
C-40	4,177	299	1,249	191	5,528	564	43,964	43,958
C-41	9,093	5,660	6,214	857	9,776	2,309	94,926	94,917
C-41A	2,124	56	9,536	2,513	9,514	22	58,487	58,483
Fisheating Creek	66,770	5,101	14,825	1,020	68,783	3,714	282,186	282,164
L-48	575	728	856	331	2,549	10	20,774	20,774
L-49	817	291	1,214	280	1,023	24	12,093	12,093
L-59E	1,132	210	170	279	2,180	27	14,436	14,436
L-59W	1,523	12	335	28	265	122	6,440	6,440
L-60E	2,097	119	12	0	362	0	5,038	5,039
L-60W	979	25	331	4	100	0	3,271	3,270
L-61E	2,519	23	2,374	17	2,154	134	14,286	14,286
L-61W	2,645	0	2,685	21	3,569	294	13,567	13,567
Nicodemus Slough	3,259	1	821	147	4,138	1,157	25,081	25,081
S-131	420	631	161	212	556	109	7,164	7,163
S-133	2,051	12,029	853	1,060	1,500	0	25,660	26,147
S-135	1,090	1,500	278	592	835	0	17,455	17,672
S-154	1,451	4,174	323	167	4,353	575	31,619	31,710
S-154C	110	0	0	42	175	0	2,179	2,246
S-191-Taylor Creek / Nubbin Slough	15,115	9,499	6,674	1,536	11,490	518	121,817	122,541
S-65A	14,179	10,824	7,104	251	22,349	18	103,146	103,146
S-65B	11,956	2,564	1,424	275	36,147	9	120,039	119,821
S-65C	4,178	34	1,505	368	11,279	0	50,444	51,238
S-65D	11,956	3,335	2,156	2,484	26,774	7	116,587	114,972
S-65E	3,539	1,389	1,585	517	2,797	111	29,157	28,650
(1) Total - 2021 (sum of above)	163,755	58,505	62,683	13,193	228,195	9,725	1,219,814	1,219,814
(2) Total - 1995	163,755	40,465	75,069	13,193	228,195	9,725	1,219,814	
(3) Difference by Sub-Basin: 1995 to 2021 = (1) minus (2)	0	18,040	-12,386	0	0	0	0	
(4) Difference by County: 1995 to 2021	0	18,040	-12,386	0	0	0	0	
(5) Change in Total Acres = (3) minus (4)	0	0	0	0	0	0	0	